### **MAPLE VALLEY**

# **Shoreline Master Program**

# April 2019

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# 1.Introduction

### 1.1 Historical Overview of Maple Valley's Shorelines

#### 1.1.1 Early Settlement

Man has lived in this area of the Pacific Northwest ever since the glaciers and ice sheet retreated between 10,000 and 12,000 years ago. Between that time and the 19<sup>th</sup> Century, the vicinity was populated by various Native American peoples, the Snoqualmies being one of the largest groups.

European settlement began after coal was discovered in the Renton area shortly after 1850. By the early 1880s, a narrow-gauge railroad connected Renton with the coalfields of Black Diamond and Franklin, running by Lake Wilderness and through the area that would one day be Maple Valley. Prior to the railroad's construction, travel to Maple Valley was difficult, as the "roads" of the time were mere trails.

The earliest development in the Lake Wilderness vicinity was associated with logging and agriculture. In the 1890s, the Hanson Mill operated at the south end of the lake. Nearby was a settlement known as Eddyville, which boasted a one-room schoolhouse and a post office. Farms dotted the north end of the lake. One of these was the Schlotman dairy, homesteaded by Henry Schlotman, a blacksmith from Black Diamond, and his new bride, Lena Heuth, a widow with three children. Henry and Lena became the first homesteaders in what is today Maple Valley. Their house, built in 1887, stood at the intersection of Witte Road and SE Maple Valley Highway for almost a century.

The name "Maple Valley" was a gift of the United States Post Office. Three of the earliest

settlers—C.O. Russell, George Ames, and Henry Sidebotham—had taken adjoining land claims in 1878 just north of Black Diamond. Deciding their new "town" needed a name, Henry suggested "Vinemaplevalley." At that time, mail service consisted of "folks going to Renton" who took the mail back and forth. After postal service became more formalized, the

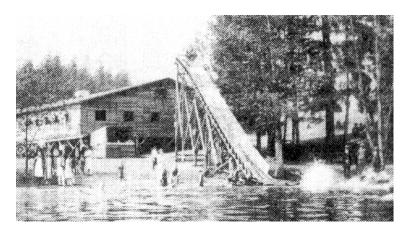


Post Office ruled the name should be broken apart into its separate words, and the "Vine" was lost. Thus was born "Maple Valley."

#### 1.1.2 Lake Wilderness

Even in the early days of European settlement, Lake Wilderness enjoyed a reputation as one of the clearest of the lowland lakes in western Washington, which made it a particularly popular recreational destination.

At the turn of the century, the Jacobsen family opened their farm on the northwest shore of the lake to hunting and fishing. By the 1920s, three families—the Dickmans, the McKinleys, and the Kingen brothers—operated small resorts on Lake Wilderness. Then, in 1926, two brothers, Kain and Tom Gaffney, purchased the Kingens' property, brought in sand to create a pleasant beach, extended a dock to create sheltered swimming areas, added more cabins, and built



tennis courts, picnic areas, baseball fields, waterslides, playgrounds, and a dance pavilion.

The Gaffneys continued to expand and improve their facilities during the Depression. In 1936, after the original dance hall burned down, they built a beautiful new hall with a Moorish theme and maple dance floors. The Gaffney brothers extended their holdings in 1939 through the purchase of the neighboring McKinney resort property, acquiring a dock, 67

more cabins, and a roller rink. In the 1940s, the Gaffneys expanded their holdings again by purchasing the adjacent Dickman property. This purchase enlarged the resort to 108 acres. It stretched for half a mile along the Lake Wilderness shoreline.

During World War II, wartime industries attracted young workers to the plants in Renton and Auburn. The Gaffney resort drew weekend crowds to its dances and other attractions. An advertisement for the resort in the 1940s described it as the "largest resort in the Northwest" and listed among its attractions the Sunday afternoon double-header baseball games and dancing to the eight-piece Bus Riley's Orchestra.

When the war ended, the Gaffneys decided to modernize their resort facilities by building new cabins and the Lake Wilderness Lodge, now the Lake Wilderness Conference Center. The lodge was carefully sited and configured to take advantage of picturesque views of Lake Wilderness and Mount Rainier. A carved cedar pole, inspired by Northwest Native American

art, dominated the central core of the building. When it opened in 1950, the lodge received several design awards and remains an outstanding example of Northwest-style architecture from the post-World War II era. An airstrip was built that made the resort accessible by small plane in just 12 minutes from the Renton airstrip. A person could fly into the resort, play a round of golf, have a wonderful meal while looking out at the vista of Mount Rainier and Lake Wilderness, and then spend the night at the lodge or one of the cabins.





But the boom for the area's resorts was over. As automobile ownership increased and improved highways reached throughout the West, people began to travel further for their vacations—into the mountains or to the ocean beaches. Closer to home, a growing public park system provided recreation opportunities. All of these factors contributed to the decline of the county's lake resorts. Lake Wilderness Lodge operated at a loss for most of the years following its opening. The clientele had also changed. In the last years of its operation, the resort began to experience teen problems and rowdy patrons.

Janet Gaffney Bertagni, daughter of the resort's last owners, says her parents could have sold the property to a developer. Instead, they chose to save the lake by selling it

to the King County Parks system, which developed the park the public enjoys today.

But the problems were not over. Eurasian milfoil took over the lake, and it became unsafe for swimming. Then, in 1994, residents around the lake formed the Lake Wilderness Preservation Association. As a result of those initial meetings, clean-up actions began that returned Lake Wilderness to health. Internal combustion engines are now prohibited on the lake. It is managed for trout, and bald eagles are sighted along its shoreline.

Today, Lake Wilderness is a 67-acre lake with an average depth of 21 feet and public access for boats. An estimated 65,000 people visit the park each year, and it is heavily used for swimming, boating, fishing, and community activities, including the Maple Valley Days fair, which is held at the lake in early June.

### 1.1.3 Lake Lucerne and Pipe Lake

The Gaffney's resort on Lake Wilderness was not the only large water resort in the area. The following is taken from a booklet entitled "A Glimpse of a Charmed Land 1925," published by Meico Historical Publications.

Among the new resorts which must inevitably become popular with tourists, outing parties and weekend vacationists, will be found the "Lake Lucerne and Pipe Lake" resort on the Maple Valley road not more than seven miles from Black Diamond and within three miles of Maple Valley. Lake Lucerne and Pipe Lake have been known in the past as Pipe Lake, but in putting in this fine resort, Messrs. Smith and Greenhagen decided that inasmuch as Pipe Lake and another beautiful lake are connected by a narrow strip of water, that Lake Lucerne and Pipe Lake would be a more euphonious and fitting name for the resort, and the road maps are being changed to so inform the traveling public.

Lake Lucerne and Pipe Lake is a beautiful spot in the virgin forest and only a few hundred feet from the main highway. The camping grounds are delightful, the picnic grounds scenic, handy and roomy, while the pretty cottages which surround the lake make a most delightful abode for a summer vacation. Just recently finished, right on the very edge of the lake, is a fine rustic inn which will be equipped with a modern dining room and a number of rooms for visitors, while the main grounds are being modernly equipped for camp lunch and refreshment service. A long canopy with built-in tables, is now complete, and within another week 25 new cottages will be ready for occupancy.

A splendid fresh water system is being provided, the big tank just undergoing completion and the company now has many fine boats in their new boat house.

Lake Lucerne and Pipe Lake comprise many beautiful things, conspicuous among which are the gigantic virgin forest trees which are found all over the grounds; a pretty bathing beach, and a picnic ground, right by the side of Lake Lucerne, which, in itself, is an eden of silvan beauty in a land of pure delight.

The patrons at this rustic resort will find fishing that cannot be excelled, boating, bathing, trail climbing, resting in hammocks of ease, swings and play grounds for children; nature in her own green robes and health which makes the doctor's rules.

While the construction work is not entirely completed, nevertheless tourists may go there now with a thorough guarantee that they will receive the greatest of courtesy by the generous, hospitable management which no resort in the state can excel.

In the publicity brochures of the 1920s, Lake Lucerne and Pipe Lake were "edens of silvan beauty in a land of pure delight." But times changed for them as they did for Lake Wilderness. In the 1950s, the property around Lake Lucerne and Pipe Lake was platted and sold off. The Cherokee Bay Developers wrote prospective homeowners letters offering "selected tracts" for \$95—\$50 down and the remainder billed at \$10 per month. The offer even included surveying, streets, and the clubhouse and sports facilities at the nearby lodge. Today, Lake Lucerne and Pipe Lake are primarily residential.



Lake Wilderness, Lake Lucerne, and Pipe Lake have seen dramatic changes over the decades. The intent of the Maple Valley Shoreline Master Program is that they once again be "edens of silvan beauty"—and that they remain so.

Lake Lucerne and Pipe Lake in 1936

#### 1.2 Shoreline Natural Processes

### **1.2.1 Glacial History**

The landscape and lakes in the City of Maple Valley exist as a result of the last glaciation. The



last glacier moved through the area about 12,000 years ago. Several ice ages have shaped the geologic strata. The times in between the ice ages have resulted in old river valleys and other features that were buried by the last glacier. Bedrock as well as these old features are coated with material left by the last glacier as it plowed forward. Till, as this coating is called, is relatively impermeable as it is thoroughly mixed, and compacted by the weight of the glacier to the consistency of concrete. The till was buried beneath a layer of "outwash", or gravel, as the glacier melted. Generally the till has been left exposed on hilltops and plateaus in the Maple Valley area. Till exists under the flats too, but has been filled in or buried by the sand and gravel except at these higher elevations.

The moving water that left the sand and gravel did a fairly good job of sorting the rocks. Maple Valley was close to the source of meltwater, which was rapidly flowing. Consequently only the larger rock settled out. The channels braided and changed quickly, and formed a level plain with the hilltops and plateaus of till sticking out. This plain has been further eroded and shaped by today's steams, leaving the landscape we see today.

#### 1.2.2 Soils and Chemical Interactions

Pipe Lake and Lake Lucerne sit in a depression left in a hilltop covered by till. It is covered by up to three feet of gravelly, loose material which was left by the ice melting in place. Enough tributary area exists on the depression to support the lake from precipitation and runoff. Enough gravel and loose soil sits on the till to let the runoff be subsurface. This provides somewhat of a natural filter. It is effective on keeping silt out of the lake, but doesn't filter out anything that can be dissolved in water. Chemicals and contaminants that dissolve readily can get into the lake, and fairly quickly because they have a limited distance to travel.

Lake Wilderness is lower in elevation that Pipe and Lucerne Lakes, and sits adjacent to a hillside covered in till. The other sides are part of the gravel plain. The water is trapped by the till, and the water is not only in the lake, but in the gravel. It forms a "water table" that contributes to the lake.

Like Lake Lucerne and Pipe Lake, the gravel filters the runoff, but the gravel allows chemicals and contaminants to move into the water. The gravel is very porous, about the consistency of a bag of marbles, and water travels though quickly. None of the lakes has enough fine materials in the sediment to be effective in trapping chemical contaminants in the water. One of the naturally occurring chemicals that readily dissolves in water is phosphorus. This chemical is a concern because it is also a fertilizer, and is applied to lawns.

The high level of phosphorus in the lakes is a concern because phosphorus is a nutrient for aquatic plant growth. Combined with nitrogen, which is not naturally at high levels in the lake, it becomes a nutritious mix for aquatic plants. Nitrogen is a chemical found in lawn fertilizer. So that is why the plan limits lawns on the lake frontage. By itself phosphorus is just another mineral in the water. But combined with nitrogen in fertilizer it can cause rapid growth. Algae, Nymphaea odorata, Potamogeton spp., Chara spp., Hydrilla, as well as Eurasian milfoil are all aquatic plants that rapidly grow under the right conditions. In fact, a lakes management district has been formed to manage the growth of plants in the water of the Lake Wilderness.

#### 1.2.3 Shoreline Vegetation

Over time the shoreline of our lakes has become "improved". Most of these changes, such as the clearing of vegetation and the planting of lawns, or beds of yellow flag iris, have come at the expense of natural habitat functions. Additions of maintenance chemicals or the clearing out of debris that forms hiding areas for fish have damaged the habitat.

Windblown trees (as shown in the historical photo of Pipe Lake) are important to the habitat of the lakes. As trees are lost to natural processes, they should be preserved in the water. They do not necessarily have to stay where they are blown down for recreational safety reasons, but they should be relocated in the water.

Bulkheads are a popular form of water's edge treatment. However, it is a form that limits the interaction of vegetation and water. The use of bulkheads should be minimized, and should not extend across the frontage of the lot. Forms of "softening" the water's edge are included in the regulations. Where vegetation is added or replaced at the water's edge, it should be from a list of plant material that has habitat value. Native plants, even ones that have limited habitat value, should be included due to their long-term survival.

Beds of yellow flag iris should be replaced, or at least gradually diminished like bulkheads, with a list of approved plant material. Such a list can be found in the appendices.

# 1.3 The Washington State Shoreline Management Act

#### 1.3.1 Purpose of the Shoreline Management Act

In 1969, the Washington State Supreme Court decided in the case of Wilbur v. Gallagher (77 Wn 2d 302), commonly known as the "Lake Chelan Case", that certain activities along shorelines were contrary to the public interest. The court findings required that the public interest be represented in the proper forum for determining the use of shoreline properties. The ramifications of these decisions were significant in that developers, environmentalists, and other interested parties began to recognize, although probably for different reasons, the need for a comprehensive planning and regulatory program for shorelines.

In June 1971 the state legislature approved just such a regulatory program when it passed into law the "Shoreline Management Act of 1971 (SMA)". The Act carried with it provisions for a vote by the people and in November 1972 the issue was put to Washington voters who approved the legislature's "Shoreline Management Act" by an approximate 2 to 1 margin.

The goal of the SMA is "to prevent the inherent harm in an uncoordinated and piecemeal development of the State's shorelines." While protecting shoreline resources by regulating development, the SMA is also intended to provide for appropriate shoreline use by encouraging land uses that enhance and conserve shoreline functions and values. The SMA has three broad policies:

- Encourage water-dependent and water-oriented uses: "uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the states' shorelines...."
- 2. Promote public access: "the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally."

3. Protect shoreline natural resources, including "...the land and its vegetation and wildlife, and the water of the state and their aquatic life...."

The SMA and implementing SMP Guidelines require all towns, cities, and counties across the State to comprehensively update their SMPs. The SMP update allows preparations of a locally tailored program that represents the visions and interests of our citizens and meets the needs of our rural communities.

After the City's local development and adoptions process is complete, the SMP is reviewed by the Washington State Department of Ecology (Ecology) to ensure compliance with the SMP Guidelines.

### 1.3.2 Shoreline Management Act Administration

Administration of the SMA is a cooperative effort balancing local and state-wide interests in the management and development of shoreline areas by requiring local governments to plan (via shoreline master programs) and regulate (via permits) shoreline development. Local government actions are monitored by the Washington State Department of Ecology, which approves new or amended SMPs, reviews substantial development permits, and approves conditional use permits and variances. The master program is essentially a shoreline comprehensive plan with a distinct environmental orientation applicable to shoreline areas and customized to local circumstances. Collectively, the local master programs comprise the State Shoreline Master Program. Under the law, each city and county in Washington State is responsible for the following:

- 1. Preparation of a shoreline master program to manage the uses and activities on local shorelines.
- 2. Administration of a shoreline permit system for proposed substantial development and uses within shoreline jurisdiction.
- 3. Development of an inventory of natural characteristics and land use patterns along those designated water bodies.

### 1.3.3 Shoreline Management Act Scope

The Shoreline Management Act covers all shorelines of the state, including "shorelines" and "shorelines of state-wide significance." Provisions of the Act apply to the following geographical shoreline areas [RCW 90.58.030(2)]:

- 1. All marine waters of the state, together with the lands underlying them.
- 2. Streams and rivers with a mean annual flow of twenty (20) cubic feet per second (cfs) or more.
- 3. Lakes and reservoirs larger than twenty (20) acres in area.
- 4. All lands within 200 feet of the ordinary high water mark (OHWM) of any water meeting the criteria of 1, 2 or 3 above.
- 5. All wetlands and river deltas associated with any water meeting the criteria of 1, 2, or 3 above.

In the case of Maple Valley, the following areas are within Shoreline Management Act jurisdiction:

- Lake Wilderness.
- Pipe Lake.
- · Lake Lucerne.
- All lands within 200 feet (measured on a horizontal plane) of the ordinary high water mark of any of the lakes named above and all wetlands associated with any of the lakes named above.

# 1.4 Maple Valley's Shoreline Master Program

As noted above, the SMA sets up a process for managing development of the state's shorelines through state-monitored, locally administered permitting programs. Local governments are required to prepare a "shoreline master program" to manage shoreline development. The Act specifies that master programs include policy statements (i.e., the required "elements") that take into account economic development, public access, circulation and transportation, recreation, shoreline use, conservation, and historical and cultural aspects of the shoreline area [RCW 90.58.100(2)]. Based upon the inventory of local shorelines, a system for categorizing various segments of the shoreline is established through application of shoreline "environment designations." From these policy statements, regulations are developed which establish appropriate permitted uses within each shoreline environment.

Prior to the adoption of this Shoreline Master Program, Maple Valley's shorelines were managed under the King County SMP. Following incorporation in 1997, the City became responsible for developing a new master program to manage its shoreline resources.

Throughout this document, the terms "Shoreline Master Program," "SMP," and "this master program" are used interchangeably.

# 1.4.1 Applying for a Shoreline Permit or Letter of Exemption

Shoreline permits (including substantial development permits, conditional use permits and variances) and letters of exemption are issued by the City of Maple Valley. Although the Washington State Department of Ecology also reviews shoreline permits, all applications and requests for information should be directed to the City of Maple Valley Department of Community Development. Persons contemplating shoreline development (please see Section 2 for the definition of "development") should first contact the Department of Community Development to obtain the required permit or letter of exemption forms and for assistance on preparation of an application. City staff members will explain the permit or letter of exemption process. If you are unsure if a permit is required, contact the Department of Community Development.

# 1.4.2 Relationships to Other Codes, Ordinances, and Plans

- 1. All applicable federal, state, and local laws shall apply to properties in the shoreline jurisdiction.
- 2. Consistent with RCW 36.70A.480, the goals and policies of this SMP approved under chapter 90.58 RCW shall be considered part of the City's Comprehensive Plan. All

- regulatory elements of this SMP, including, but not limited to, definitions and use regulations, shall be considered a part of the City's development regulations.
- 3. All local development regulations including, but not limited to, zoning and subdivision rules shall apply in addition to this SMP. This SMP includes critical areas regulations applicable only in shoreline jurisdiction, and shall control within shoreline jurisdiction over other City critical area regulations adopted pursuant to the Growth Management Act.
- 4. In the event provisions of this SMP conflict with provisions of federal, state, or City regulations, the provision that is most protective of shoreline resources shall prevail, when consistent with policies set out in the SMA.

#### 1.4.3 Liberal Construction

As provided for in RCW 90.58.900, the SMA is exempted from the rule of strict construction; the SMA and this SMP shall therefore be liberally construed to give full effect to the purposes, goals, objectives, and policies for which they were enacted.

#### 1.4.4 Effective Date

The SMP is hereby adopted on \_\_\_\_\_\_. This SMP and all amendments thereto shall become effective 14 days from the date of the Washington Department of Ecology's written notice of final approval.

# 2. Definitions

Accessory use. Any structure or use incidental and subordinate to a primary use or development.

Act. The Shoreline Management Act (Chapter 90.58 RCW).

Adjacent lands. Lands adjacent to the shorelines of the state (outside of shoreline jurisdiction).

Administrator. The Community Development Director or his/her designee, charged with the responsibility of administering the shoreline master program.

Appurtenance. A structure or development which is necessarily connected to the use and enjoyment of a single-family residence and is located landward of the ordinary high water mark and also of the perimeter of any wetland. (On a state-wide basis, normal appurtenances include a garage, deck, driveway, utilities, fences and grading which does not exceed two hundred fifty cubic yards [except to construct a conventional drainfield].)

Aquatic. Pertaining to those areas waterward of the ordinary high water mark.

Aquaculture. The culture or farming of fish, shellfish, or other aquatic animals and plants. Aquaculture does not include the harvest of wild geoduck associated with the state managed wildstock geoduck fishery.

Archaeological. Having to do with the scientific study of material remains of past human life and activities.

Associated Wetlands. Wetlands that are in proximity to and either influence, or are influenced by tidal waters or a lake or stream subject to the Shoreline Management Act. Refer to WAC 173-22-030(1).

Average grade level. The average of the natural or existing topography of the portion of the lot, parcel, tract of real property which will be directly under the proposed building or structure. In the case of structures to be built over water, average grade level shall be the elevation of the ordinary high water mark. Calculation of the average grade level shall be made by averaging the ground elevations at the midpoint of all exterior walls of the proposed building or structure.

*Beach*. The zone of unconsolidated material that is moved by waves and wind currents, extending landward to the shoreline.

Beach enhancement/restoration. Process of restoring a beach to a state more closely resembling a natural beach, using beach feeding, vegetation, drift sills and other nonintrusive means as applicable.

Berm. A linear mound or series of mounds of sand and/or gravel generally paralleling the water at or landward of the line of ordinary high tide. Also, a linear mound used to screen an adjacent activity, such as a parking lot, from transmitting excess noise and glare.

Best available science. Current scientific information, which is used to designate, regulate, protect, or restore critical areas and which is derived from a valid scientific process as set forth in WAC 365-195-900 through 365-195-925.

Best management practices (BMPs). The best available conservation practices or systems of practices and management measures that:

- a. Control soil loss and protect water quality from degradation caused by nutrients, animal waste, toxins, and sediment; and
- b. Minimize adverse impacts to surface water and groundwater flow, circulation patterns, and to the chemical, physical, and biological characteristics of critical areas.

*Bioengineering.* The use of biological elements, such as the planting of vegetation, often in conjunction with engineered systems, to provide a structural shoreline stabilization measure with minimal negative impact to the shoreline ecology.

*Biofiltration system.* A stormwater or other drainage treatment system that utilizes as a primary feature the ability of plant life to screen out and metabolize sediment and pollutants. Typically, biofiltration systems are designed to include grassy swales, retention ponds and other vegetative features.

Boating Facilities. A docking place for boats, a public boat launch, or mooring buoy. Boating facilities do not include docks serving four or fewer single-family residences.

*Buffer area.* A parcel or strip of land that is designed and designated to permanently remain vegetated in an undisturbed and natural condition to protect an adjacent aquatic or wetland site from upland impacts, to provide habitat for wildlife and to afford limited public access.

*Bulkhead.* A solid wall erected generally parallel to and near the ordinary high water mark for the purpose of protecting adjacent uplands from waves or current action.

Buoy. An anchored float for the purpose of mooring vessels.

Channel. An open conduit for water, either naturally or artificially created; does not include artificially created irrigation, return flow, or stockwatering channels.

City. The City of Maple Valley.

Clean Water Act. The primary federal law providing water pollution prevention and control; previously known as the Federal Water Pollution Control Act. (See 33 USC 1251 et seq.)

*Clearing.* The destruction or removal of vegetation ground cover, shrubs and trees including, but not limited to, root material removal and/or topsoil removal.

Conditional use. A use, development, or substantial development which is classified as a conditional use or is not classified within the applicable master program.

Covered moorage. Boat moorage, with or without walls, that has a roof to protect the vessel.

Department of Ecology. The Washington State Department of Ecology.

Development. A use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to Chapter 90.58 RCW at any stage of water level. "Development" does not include dismantling or removing structures if there is no other associated development or re-development. (RCW 90.58.030(3)(a) and WAC 173-27-030(6))

Development regulations. The controls placed on development or land uses by a county or city, including, but not limited to, zoning ordinances, critical areas ordinances, all portions of a shoreline master program other than goals and policies approved or adopted under Chapter 90.58 RCW, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto.

Director. City of Maple Valley Community Development Director.

Dock. A structure which abuts the shoreline and is used as a landing or moorage place for craft. A dock may be built either on a fixed platform or float on the water. See also "development" and "substantial development."

Document of record. The most current shoreline master program officially approved or adopted by rule by the Department of Ecology for a given local government jurisdiction, including any changes resulting from appeals filed pursuant to RCW 90.58.190.

*Dredging.* Excavation or displacement of the bottom or shoreline of a water body.

EA. Environmental Assessment, under SEPA/NEPA.

Ecological functions (or shoreline functions). The physical, chemical, and biological processes that contribute to the proper maintenance of the aquatic and terrestrial environments that constitute the shoreline ecosystem. Ecological functions relevant to specific shoreline ecological systems include, but are not limited to:

#### (a) Lacustrine:

- Water quality: Removing excessive nutrients and toxic compounds and removing and/or stabilizing sediments.
- Habitat for: Proposed, threatened, endangered, and priority species (whatever they
  may be in the jurisdiction); aquatic and shoreline-dependent birds, invertebrates, and
  mammals; amphibians; and anadromous and resident native fish. Habitat functions
  may include, but are not limited to, shade, litter and woody debris recruitment,
  refugia, and food production.

#### (b) Wetlands:

- Flood attenuation.
- Water quality: Removing excessive nutrients and toxic compounds.
- · Ground water recharge.
- · Maintenance of base flows.
- Nutrient filtering.

Habitat for: Proposed, threatened, endangered, and priority species (whatever they
may be in the jurisdiction); aquatic and shoreline-dependent birds, invertebrates, and
mammals; amphibians; and anadromous and resident native fish. Habitat functions
may include, but are not limited to, shade, litter and woody debris recruitment,
refugia, and food production.

Ecosystem-wide processes. The suite of physical and geologic processes of erosion, transport, and deposition and specific chemical processes (e.g., flocculation) that shape landforms within a specific shoreline ecosystem and determine both the types of habitat that are present and the associated ecological functions and their processes.

#### EIS. Environmental Impact Statement.

Emergency. An unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with the master program. Emergency construction is construed narrowly as that which is necessary to protect property and facilities from the elements. Emergency construction does not include development of new permanent protective structures where none previously existed. Where new protective structures are deemed by the administrator to be the appropriate means to address the emergency situation, upon abatement of the emergency situation the new structure shall be removed or any permit which would have been required, absent an emergency, pursuant to Chapter 90.58 RCW, these regulations, or the local master program, obtained. All emergency construction shall be consistent with the policies of Chapter 90.58 RCW and the local master program. As a general matter, flooding or seasonal events that can be anticipated and may occur but that are not imminent are not an emergency. (WAC 173-27-040)

*Enhancement.* Alteration of an existing resource to improve or increase its characteristics, functions, or processes without degrading other existing ecological functions. Enhancements are to be distinguished from resource creation or restoration projects.

*Envelope*. The existing or former bulk of a structure.

*Erosion*. The wearing away of land by the action of natural forces.

Exemption. Certain specific developments as listed in WAC 173-27-040 are exempt from the definition of substantial developments are therefore exempt from the substantial development permit process of the SMA. An activity that is exempt from the substantial development provisions of the SMA must still be carried out in compliance with policies and standards of the Act and the local master program. Conditional use and/or variance permits may also still be required even though the activity does not need a substantial development permit. (RCW 90.58.030(3)(e); WAC 173-27-040.) (See also "development" and "substantial development.")

Fair market value. The open market bid price for conducting the work, using the equipment and facilities, and purchase of the goods, services, and materials necessary to accomplish the development. This would normally equate to the cost of hiring a contractor to undertake the development from start to finish, including the cost of labor, materials, equipment and facility usage, transportation, and contractor overhead and profit. The fair market value of the development shall include the fair market value of any donated, contributed, or found labor, equipment, or materials.

*Feasible*. For the purpose of this master program, that an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions:

- (a) The action can be accomplished with technologies and methods that have been used in the past, or studies or tests have demonstrated that such approaches are currently available and likely to achieve the intended results.
- (b) The action provides a reasonable likelihood of achieving its intended purpose.
- (c) The action does not physically preclude achieving the project's primary intended use.

In cases where these guidelines require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant.

In determining an action's infeasibility, the City may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

*Fill.* The addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the ordinary high water mark, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

*Gabions*. Structures composed of masses of rocks, rubble or masonry held tightly together usually by wire mesh so as to form blocks or walls. Sometimes used on heavy erosion areas to retard wave action or as foundations for breakwaters or jetties.

Geotechnical report (or geotechnical analysis). A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified engineers or geologists who are knowledgeable about the regional and local shoreline geology and processes.

Grade. See "Average grade level"

*Grading.* The movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land. Grading can also involve either the export of materials off-site, or the import of materials from an off-site source.

*Grassy Swale*. A vegetated drainage channel that is designed to remove various pollutants from stormwater runoff through biofiltration.

Guidelines. Those standards adopted by the Department of Ecology into the Washington Administrative Code (WAC) to implement the policy of Chapter 90.58 RCW for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards shall also provide criteria for local governments and the Department of Ecology in developing and amending master programs.

Habitat. The place or type of site where a plant or animal naturally or normally lives and grows.

Height or building height. Height is measured from average grade level to the highest point of a structure: provided, that television antennas, chimneys, and similar appurtenances shall not be

used in calculating height, except where such appurtenances obstruct the view of the shoreline of a substantial number of residences on areas adjoining such shorelines, or the applicable master program specifically requires that such appurtenances be included: provided further, that temporary construction equipment is excluded in this calculation.

Impervious Surface. A hard or compacted surface such as roofs, pavement, gravel or dirt.

Lacustrine (also lacustrian). Of, on, or pertaining to lakes.

Lake. A body of standing water in a depression of land or expanded part of a river, including reservoirs, of twenty (20) acres or greater in total area. A lake is bounded by the ordinary high water mark or, where a stream enters a lake, the extension of the elevation of the lake's ordinary high water mark within the stream. (WAC 173-22-030(4))

Letter of exemption. A letter or other official certificate issued by a local government to indicate that a proposed development is exempted from the requirement to obtain a shoreline permit as provided in WAC 173-27-050. Letters of exemption may include conditions or other provisions placed on the proposal in order to ensure consistency with the Shoreline Management Act, this chapter, and the applicable master program.

Littoral. Living on, or occurring on, the shore.

Littoral drift. The mud, sand, or gravel material moved parallel to the shoreline in the nearshore zone by waves and currents.

Low Impact Development (LID). A stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

*May.* Refers to actions that are acceptable, provided they conform to the provisions of this chapter.

*Mitigation (or mitigation sequencing)*. The process of avoiding, reducing, or compensating for the environmental impact(s) of a proposal, including the following listed in the order of sequence priority, with (a) of this subsection being top priority.

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations.
- (e) Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
- (f) Monitoring the impact and the compensation projects and taking appropriate corrective measures.

*Moorage facility.* Any device or structure used to secure a boat, float plane or a vessel, including piers, docks, piles, lift stations or buoys.

*Mulching*. The addition of organic materials (e.g. woodchips, sawdust, straw, grass clippings, or compost, etc.) to bare soils or in planting beds.

*Multi-family dwelling (or residence).* A building containing two or more dwelling units, including but not limited to duplexes, apartments and condominiums.

Must. A mandate; the action is required.

Nonconforming use. An existing shoreline use that was lawfully established prior to the effective date of the act or the applicable master program, but which does not conform to present use regulations due to subsequent changes to the master program.

Nonconforming development or nonconforming structure. An existing structure that was lawfully constructed at that time it was built but is no longer fully consistent with present regulations such as setbacks, buffers or yards; area; bulk; height or density standards due to subsequent changes to the master program.

Nonconforming lot. A lot that met dimensional requirements of the applicable master program at the time of its establishment but now contains less than the required width, depth or area due to subsequent changes to the master program.

Nonpoint pollution. Pollution that enters any waters of the state from any dispersed land-based or water-based activities, including, but not limited to, atmospheric deposition, surface water runoff from agricultural lands, urban areas, or forest lands, subsurface or underground sources, or discharges from boats or marine vessels not otherwise regulated under the National Pollutant Discharge Elimination System program.

*Nonwater-oriented uses.* Those uses that are not water-dependent, water-related, or water-enjoyment.

*Normal maintenance.* Those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. See also "normal repair."

*Normal protective bulkhead.* Those structural and nonstructural developments installed at or near, and parallel to, the ordinary high water mark for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion.

*Normal repair.* To restore a development to a state comparable to its original condition, including, but not limited to, its size, shape, configuration, location, and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. (WAC 173-27-040) See also "normal maintenance" and "development."

Off-site replacement. To replace wetlands or other shoreline environmental resources away from the site on which a resource has been impacted by a regulated activity.

OHWM. See "ordinary high water mark."

Ordinary high water mark (OHWM). That mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the Department of Ecology. See RCW 90.58.030(2)(c).

Party of record. All persons, agencies, or organizations who have submitted written comments in response to a notice of application, made oral comments in a formal public hearing conducted on the application, or notified local government of their desire to receive a copy of the final decision on a permit and who have provided an address for delivery of such notice by mail.

Periodic. Occurring at regular intervals.

*Person.* An individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, or agency of the state or local governmental unit however designated. (RCW 90.58.030(1)(e).)

*Pier.* An over-water structure, generally used to moor vessels or for public access, that is supported by piles and sits above the OHWM. A pier may be all or a portion of a dock.

*Primary Structure*. A structure that is central to the fundamental use of the property and is not accessory to the use of another structure on the property. Examples include a single-family home, multi-family housing or commercial building.

*Provisions*. Policies, regulations, standards, guideline criteria or designations.

*Public access.* Public access is the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations. (WAC 173-26-221(4))

*Public interest.* The interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected such as an effect on public property or on health, safety, or general welfare resulting from a use or development.

Qualified professional. A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise and/or certification appropriate for the relevant subject. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology, or related field and, unless otherwise specified in this Master Program, must have at least two years of related work experience.

*RCW.* Revised Code of Washington.

Repair or maintenance activities. An action to restore the character, size, or scope of a project only to the previously authorized condition.

Residential development. Development which is primarily devoted to or designed for use as a dwelling(s).

Restore. To significantly re-establish or upgrade shoreline ecological functions through measures such as revegetation, removal of intrusive shoreline structures, and removal or treatment of toxic sediments. To restore does not necessarily imply returning the shoreline area to aboriginal or pre-European settlement condition.

Revetment. Facing of stone, concrete, etc., built to protect a scarp, embankment, or shore structure against erosion by waves of currents.

*Riprap.* A layer, facing, or protective mound of stones placed to prevent erosion, scour, or sloughing of a structure or embankment; also, the stone so used.

*Runoff.* Water that is not absorbed into the soil but rather flows along the ground surface following the topography.

Sediment. The fine grained material deposited by water or wind.

SEPA (State Environmental Policy Act). SEPA requires state agencies, local governments and other lead agencies to consider environmental factors when making most types of permit decisions, especially for development proposals of a significant scale. As part of the SEPA process, EISs may be required to be prepared and public comments solicited.

Setback. A required open space, specified in shoreline master programs, measured horizontally upland from and perpendicular to the ordinary high water mark.

Shall. A mandate; the action must be done.

Shoreline areas (and shoreline jurisdiction). The same as "shorelines of the state" and "shorelands" as defined in RCW 90.58.030.

Shoreline environment designations. The categories of shorelines established by local shoreline master programs in order to provide a uniform basis for applying policies and use regulations within distinctively different shoreline areas. Shoreline environment designations include: Shoreline Residential, Urban Conservancy, Natural, and Aquatic.

Shoreline functions. See "ecological functions."

Shoreline jurisdiction. The term describing all of the geographic areas covered by the SMA, related rules and the applicable master program. Also, such areas within a specified local government's authority under the SMA. See definitions of "shorelines", "shorelines of the state", "shorelines of state-wide significance" and "wetlands." See also section 1.3.3 of this master program.

Shoreline modifications. Those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a dike, breakwater, dock, weir, dredged basin, fill, bulkhead, or other shoreline structures. They can include other actions, such as clearing, grading, or application of chemicals.

Shoreline permit. A substantial development, conditional use, revision, or variance permit or any combination thereof.

Shoreline property. An individual property wholly or partially within shoreline jurisdiction.

Shoreline restoration or ecological restoration. The re-establishment or upgrading of impaired ecological shoreline processes or functions. This may be accomplished through measures including, but not limited to, revegetation, removal of intrusive shoreline structures, and removal or treatment of toxic materials. Shoreline restoration does not imply a requirement for returning the shoreline area to aboriginal or pre-European settlement conditions.

Shorelines. All of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of state-wide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes. (RCW 90.58.030(2)(e))

Shorelines of the state. The total of all "shorelines" and "shorelines of state-wide significance" within the state.

Shorelines Hearings Board (SHB). A six member quasi-judicial body, created by the SMA, which hears appeals by any aggrieved party on the issuance of a shoreline permit, enforcement penalty and appeals by local government on Department of Ecology approval of master programs, rules, regulations, guidelines or designations under the SMA.

Shorelines of state-wide significance. A select category of shorelines of the state, defined in RCW 90.58.030(2)(f), where special policies apply.

Should. The particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and this chapter, against taking the action.

*Sign.* A board or other display containing words and/or symbols used to identify or advertise a place of business or to convey information. Excluded from this definition are signs required by law and the flags of national and state governments.

Significant ecological impact. An effect or consequence of an action if any of the following apply:

- (a) The action measurably or noticeably reduces or harms an ecological function or ecosystem-wide process.
- (b) Scientific evidence or objective analysis indicates the action could cause reduction or harm to those ecological functions or ecosystem-wide processes described in (a) of this subsection under foreseeable conditions.
- (c) Scientific evidence indicates the action could contribute to a measurable or noticeable reduction or harm to ecological functions or ecosystem-wide processes described in (a) of this subsection as part of cumulative impacts, due to similar actions that are occurring or are likely to occur.

#### Significant tree:

- a. Significant tree. An existing evergreen or deciduous tree, excluding cottonwood and alders, that is 12 inches in diameter measured 4.5 feet above grade, in good health.
- b. Significant tree, planted. Any of a number of species of trees, as defined in the Maple Valley Municipal Code, Section 18.40.130, planted in a landscaping area of sufficient

- size to support a trunk size at maturity growth of at least 12 inches in diameter following the minimum standards for planted significant trees in this section.
- c. Significant tree, landmark. Any significant tree other than alder or cottonwood that is (i) 24 inches in diameter at 4.5 feet from grade, or (ii) of specimen quality, i.e., large, well-shaped, and healthy for the species.

Significant vegetation removal. The removal or alteration of native trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts to functions provided by such vegetation. The removal of invasive, non-native, or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

Single-family residence (SFR). A detached dwelling designed for and occupied by one family including those structures and developments within a contiguous ownership which are a normal appurtenance.

SMA. The Shoreline Management Act of 1971, Chapter 90.58 RCW, as amended.

Stormwater. That portion of precipitation that does not normally percolate into the ground or evaporate but flows via overland flow, interflow, channels, or pipes into a defined surface water channel or constructed infiltration facility.

*Stream.* A naturally occurring body of periodic or continuously flowing water where: a) the mean annual flow is greater than twenty cubic feet per second and b) the water is contained within a channel. See also "channel."

Structure. A permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above or below the surface of the ground or water, except for vessels.

Subdivision. The division or redivision of land, including short subdivision for the purpose of sale, lease or conveyance.

Substantial development. Any development of which the total cost or fair market value exceeds the threshold established pursuant to RCW 90.58.030(3)(e), or any development that materially interferes with the normal public use of the water or shorelines of the state; except as specifically exempted pursuant to RCW 90.58.030(3)(e) and WAC 173-27-040. See also definition of "development" and "exemption".

Substantially degrade. To cause damage or harm to an area's ecological functions. An action is considered to substantially degrade the environment if:

- (a) The damaged ecological function or functions significantly affect other related functions or the viability of the larger ecosystem; or
- (b) The degrading action may cause damage or harm to shoreline ecological functions under foreseeable conditions; or
- (c) Scientific evidence indicates the action may contribute to damage or harm to ecological functions as part of cumulative impacts.

Terrestrial. Of or relating to land as distinct from air or water.

*Upland*. Generally described as the dry land area above and landward of the ordinary high water mark.

USC. United States Code.

*Utility.* A public or private agency which provides a service that is utilized or available to the general public (or a locationally specific population thereof). Such services may include, but are not limited to, stormwater detention and management, sewer, water, telecommunications, cable, electricity, and natural gas.

*Variance.* A means to grant relief from the specific bulk, dimensional, or performance standards set forth in this master program and not a means to vary a use of a shoreline. Variance permits must be specifically approved, approved with conditions, or denied by the Administrator and the Department of Ecology.

*Vessel.* Ships, boats, barges, or any other floating craft which are designed and used for navigation and do not interfere with normal public use of the water.

WAC. Washington Administrative Code.

*Water-dependent.* A use or a portion of a use which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations. Examples of water-dependent uses may include fishing, boat launching, swimming, and stormwater discharges.

Water-enjoyment. A recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which through location, design, and operation ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment. Primary water-enjoyment uses may include, but are not limited to:

- Parks with activities enhanced by proximity to the water.
- Docks, trails, and other improvements that facilitate public access to shorelines of the state.
- Restaurants with water views and public access improvements.
- Museums with an orientation to shoreline topics.
- Scientific/ecological reserves.
- Resorts with uses open to the public and public access to the shoreline; and any
  combination of those uses listed above.

*Water-oriented.* Refers to any combination of water-dependent, water-related, and/or water enjoyment uses and serves as an all-encompassing definition for priority uses under the SMA. Nonwater-oriented uses serve to describe those uses which have little or no relationship to the shoreline and are not considered priority uses under the SMA. Examples include professional offices, automobile sales or repair shops, mini-storage facilities, multi-family residential development, department stores and gas stations.

Water quality. The physical characteristics of water within shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics. Where used in this chapter, the term "water quantity" refers only to development and uses regulated under this chapter and affecting water quantity, such as impermeable surfaces and stormwater handling practices. Water quantity, for purposes of this master program, does not mean the withdrawal of ground water or diversion of surface water pursuant to RCW 90.03.250 through 90.03.340.

Water-related use. A use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because:

- (a) The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or
- (b) The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

Watershed restoration plan. A plan, developed or sponsored by the department of fish and wildlife, the department of ecology, the department of natural resources, the department of transportation, a federally recognized Indian tribe acting within and pursuant to its authority, a city, a county, or a conservation district that provides a general program and implementation measures or actions for the preservation, restoration, re-creation, or enhancement of the natural resources, character, and ecology of a stream, stream segment, drainage area, or watershed for which agency and public review has been conducted pursuant to Chapter 43.21C RCW, the State Environmental Policy Act. (WAC 173-27-040(o)(ii))

Watershed restoration project. A public or private project authorized by the sponsor of a watershed restoration plan that implements the plan or a part of the plan and consists of one or more of the following activities:

- a. A project that involves less than ten miles of stream reach, in which less than twenty-five cubic yards of sand, gravel, or soil is removed, imported, disturbed or discharged, and in which no existing vegetation is removed except as minimally necessary to facilitate additional plantings;
- b. A project for the restoration of an eroded or unstable stream bank that employs the principles of bioengineering, including limited use of rock as a stabilization only at the toe of the bank, and with primary emphasis on using native vegetation to control the erosive forces of flowing water; or
- c. A project primarily designed to improve fish and wildlife habitat, remove or reduce impediments to migration of fish, or enhance the fishery resource available for use by all of the citizens of the state, provided that any structure, other than a bridge or culvert or instream habitat enhancement structure associated with the project, is less than two hundred square feet in floor area and is located above the ordinary high water mark of the stream. (WAC 173-27-040(o)(i))

Waters of the state: Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington. (RCW 90.48.020)

Wetland or wetlands. Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils conditions. Wetlands

generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

Zoning. The system of land use and development regulations in Title 18 and related provisions of the Maple Valley Municipal Code.

In addition, the definitions and concepts set forth in RCW 90.58.030, as amended, and implementing rules shall also apply as used herein.

Note: The Washington Administrative Code (WAC) chapters and the Revised Code of Washington (RCW) chapters referred to in this master program are those in effect at the date of the master program adoption.

# 3. Shoreline Environment Designations

### 3.1 Introduction to Environmental Designations

The shoreline environment designation system provides a method for shoreline areas to be classified, as called for in RCW 90.58.020, and is one of the principal tools available for applying and tailoring the general policies of the Act to local shorelines. Not only does classifying shorelines into specific designations provide the means of adapting broad policies to shoreline segments with distinctively different conditions and resources, but it also is a way to integrate comprehensive shoreline planning into master program regulations. The two maps and aerial photographs at the end of Section 3 illustrate the environment designation boundaries.

All areas not specifically assigned an environment designation in this document shall be designated "urban conservancy."

#### 3.2 Shoreline Residential Environment

#### 3.2.1 Purpose

The purpose of the "shoreline residential" environment is to accommodate residential development and appurtenant structures that are consistent with WAC 173-26. An additional purpose is to provide appropriate public access and recreational uses.

#### 3.2.2 Designation Criteria

Those shorelines with predominantly residential uses.

## 3.2.3 Areas Designated

All lands lying within 200 feet landward of the ordinary high water mark (OHWM) of Lake Lucerne, Pipe Lake, and Lake Wilderness, except for those areas specifically designated "urban conservancy" or "natural." (See the following sections.)

# 3.2.4 Management Policies

- New development should be permitted only in those shoreline areas where adequate setbacks or buffers are possible to protect ecological functions, there are adequate access, water, sewage disposal, and utilities systems, and public services available and where the environment can support the proposed use in a manner which protects or restores the ecological functions.
- Standards in the "shoreline residential" environment should be set to protect the shoreline ecological functions, taking into account the environmental limitations and sensitivity of the shoreline area, the level of infrastructure and services available, and other comprehensive planning considerations.
- Development standards for setbacks or buffers, shoreline stabilization, vegetation conservation, critical area protection, and water quality should be established to protect and, where significant ecological degradation has occurred, restore ecological functions over time.

- 4. Recreational developments should provide access and joint use for community recreational facilities.
- 5. Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.
- 6. Commercial development should be prohibited.
- 7. Water-oriented recreational uses should be allowed.

### 3.3 Urban Conservancy Environment

#### 3.3.1 Purpose

The purpose of the "urban conservancy" environment is to protect and restore ecological functions in urban and developed settings, while allowing a variety of water-oriented uses.

#### 3.3.2 Designation Criteria

An "urban conservancy" environment designation will be assigned to shorelands appropriate and planned for development that is compatible with maintaining or restoring of ecological functions of the area and that are not generally suitable for water-dependent uses and that lie in incorporated municipalities, urban growth areas, or commercial or industrial "limited areas of more intense rural development" if any of the following characteristics apply:

- 1. They are suitable for water-related or water-enjoyment uses.
- 2. They are open space, flood plain or other sensitive areas that should not be more intensely developed.
- 3. They have potential for ecological restoration.
- 4. They retain important ecological functions, even though partially developed.
- 5. They have the potential for development that is compatible with ecological restoration.

### 3.3.3 Areas Designated

Those portions of the following parcels or tracts lying within 200 feet landward of the OHWM of Lake Wilderness:

- Parcel No. 2122069028 (Lake Wilderness Park).
- Parcel No. 4127000355 (King County parcel south of Lake Wilderness Park on the lake's western shoreline).
- Parcel No. 4127000330 (King County parcel south of Lake Wilderness Park on the lake's western shoreline).
- Parcel No. 4127000335 (King County parcel south of Lake Wilderness Park on the lake's western shoreline).
- Tract B of the Highlands at Lake Wilderness Plat (includes a trail easement).
- Tract A of Lake Forest Estates (Lake Forest Estates Park).

Those portions of the following tracts lying within 200 feet landward of the OHWM of Pipe Lake and Lake Lucerne:

- Tract E of Cedar Downs Division 3 (Cedar Downs Park).
- Tract A of Cherokee Bay Park (Cherokee Bay Park)
- Parcel No. 2822069016 and 2822069018 (Cherokee Bay Boat Launch)

#### 3.3.4 Management Policies

- During development and redevelopment, all reasonable efforts should be taken to restore ecological functions. Where feasible, restoration and public access should be required of all nonwater-dependent development on previously developed shorelines.
- Standards should be established for shoreline stabilization measures, vegetation
  conservation, water quality, and shoreline modifications within the "urban
  conservancy" designation to ensure that new development does not further degrade
  the shoreline and is consistent with an overall goal to improve ecological functions
  and habitat for priority species.
- 3. Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.
- 4. Water-oriented uses should be given priority over nonwater-oriented uses.

### 3.4 Aquatic Environment

### 3.4.1 Purpose

The purpose of the "aquatic" environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high-water mark.

# 3.4.2 Designation Criteria

An "aquatic" environment designation will be assigned to shoreline areas waterward of the ordinary high-water mark.

# 3.4.3 Areas Designated

All lands in shoreline jurisdiction lying waterward of the OHWM.

# 3.4.4 Management Policies

- 1. New over-water structures should be prohibited except for water-dependent uses, public access, or ecological restoration.
- 2. The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use.
- 3. In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities should be encouraged.
- 4. Provisions for the "aquatic" environment should be directed towards maintaining and restoring habitat for desired aquatic species.

- 5. All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.
- 6. Uses that cause significant ecological impacts to critical freshwater habitats should not be allowed. Where those uses are necessary to achieve the objectives of RCW 90.58.020, their impacts shall be mitigated according to the sequence defined in the Section 4.4.3.4.
- 7. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.
- 8. Aquaculture practices should not be allowed.
- 9. Development of underwater pipelines and cables should be discouraged except where adverse environmental impacts can be shown to be less than the impact of upland alternatives or where no other alternatives are feasible; when permitted, such facilities should include adequate provisions to ensure against substantial or irrevocable damage to the environment.
- 10. Abandoned and neglected structures that cause adverse visual impacts or are a hazard to public health, safety, and welfare should be removed or restored to a usable condition consistent with the provision of this master program.
- 11. Internal combustion engines should be prohibited except for emergency or maintenance vessels.
- 12. Shoreline space should be reserved for shoreline preferred uses, while considering such things as upland and in-water uses, water quality, navigation, presence of aquatic vegetation, existing shellfish protection districts and critical habitats, aesthetics, public access and views.

#### 3.5 Natural Environment

### 3.5.1 Purpose

The purpose of the "natural" environment is to protect and restore those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require restrictions on the intensities and types of uses permitted to maintain the ecological functions and ecosystem-wide processes.

# 3.5.2 Designation Criteria

A "natural" environment designation will be assigned to shorelands with any of the following characteristics:

- 1. The shoreland is ecologically intact and therefore currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity.
- 2. The shoreland is considered to represent ecosystems and geologic types that are of particular scientific and educational interest.

- 3. The shoreland is unable to support new development or uses without significant ecological impacts to ecological functions or risk to human safety.
- 4. The shoreland is especially sensitive to human disturbance and important for the conservation and recovery of priority species.
- 5. The shoreland is relatively far from human development and provides food or habitat for a priority, threatened, or endangered species.
- 6. The shoreland has unique recreational and scenic value that would be degraded by human development.
- 7. The shoreland has a high value for wilderness experience.

#### 3.5.3 Areas Designated

Parcel No. 2222069095 on Lake Wilderness (the steep slope westward and downhill of the trail) and Tracts "H" and "I" of Lake Forest Estates.

#### 3.5.4 Management Policies

- 1. Any use that would substantially degrade the ecological functions or natural character of the shoreline area should be prohibited.
- Access may be permitted for scientific, historical, cultural, educational, and low-intensity water-oriented recreational purposes, provided that no significant ecological impact on the area will result.
- 3. Uses that are consumptive of physical, visual, and biological resources should be prohibited.
- 4. Physical alterations should only be considered when they serve to protect a significant, unique, or highly valued feature that might otherwise be degraded or destroyed or for public access where no significant ecological impacts would occur.
- Uses and activities permitted in locations adjacent to shorelines designated "natural" should be compatible and should ensure the integrity of the "natural" environment will not be compromised.

# 3.6 Shoreline Uses and Shoreline Modifications for Each Designation

Note: Where this chart may conflict with the written regulations in other sections, the written regulations shall apply.

#### Legend:

- P = May be allowed by Shoreline Substantial Development Permit or Shoreline Exemption
- C = May be permitted as a conditional use only
- X = Prohibited; the use is not eligible for a variance or conditional use permit
- NA = Not applicable

#### **ENVIRONMENTAL DESIGNATIONS**

	EN	ENVIRONMENTAL DESIGNATIONS		
	Shoreline Residential	Urban Conservancy	Aquatic	Natural
Shoreline Use				
Agriculture	Х	Х	Χ	Х
Aquaculture	Х	Х	Х	Х
Boating facilities	Х	P <sup>1</sup>	C <sup>1</sup>	Х
Commercial	Х	Х	Х	Х
Forestry	Х	Х	Χ	Х
Industrial	Х	Х	Х	Х
Mining	Х	Х	Х	Х
Parking (accessory)	Р	$P^2$	Х	Х
Parking (primary)	Х	Х	Х	Х
Recreation and community facilities				
Water-dependent	Р	Р	Р	Х
<ul> <li>Water-related, -enjoyment</li> </ul>	Р	Р	X	X
<ul> <li>Nonwater-oriented</li> </ul>	X	P <sup>3</sup>	X	X
Residential				
<ul> <li>Single family</li> </ul>	Р	X	X	X
<ul> <li>Multi family</li> </ul>	X	X	X	X
Land division	P	P	X	X
Overwater	X	X	Х	Х
Roads and service roads	Р	Р	NA	Х
Signs	Р	P <sup>4</sup>	Х	X
Solid waste disposal	X	X	X	X
Utilities				
<ul> <li>Primary<sup>5</sup></li> </ul>	С	С	С	X
<ul> <li>Accessory</li> </ul>	Р	Р	С	X
<b>Shoreline Modification Activity</b>				
Shoreline Stabilization				
<ul> <li>Beach restoration/enhancement</li> </ul>	Р	Р	Р	X
<ul> <li>Bioengineering</li> </ul>	Р	Р	X	X
<ul> <li>Bulkheads and revetments</li> </ul>	Р	X	X	X
<ul> <li>Breakwaters/rock weirs/groins</li> </ul>	X	X	Χ	Х
Dredging and Disposal	С	С	С	С
Fill and Excavation	Р	Р	С	С
Docks, Piers, and recreational floats	Р	Р	Р	Х
Ecological restoration	Р	Р	Р	Р
Hazardous waste cleanup/weed removal	Р	Р	$P^6$	Р

<sup>1.</sup> New boating facilities are not allowed. Maintenance, redevelopment, and expansion of existing boating facilities may be allowed in accordance with the policies and regulations in Section 5.1.

<sup>2.</sup> Parking shall be located outside shoreline jurisdiction where feasible.

<sup>3.</sup> Uses associated with Lake Wilderness Lodge building only.

<sup>4.</sup> Public informational signs related to park usage and interpretive displays only may be permitted.

<sup>5.</sup> See Section 4.5.3 Utilities for regulations for individual utility types.

6.	Provided all regulation and permit requirements of state and local resource agencies are met.

# 3.7 Shoreline Development Standards for Each Designation

Note: Where this chart may conflict with the written regulations in other sections, the written regulations shall apply.

#### **ENVIRONMENTAL DESIGNATION**

	Shoreline Residential	Urban Conservancy	Aquatic	Natural	
Recreational Development	Residential	Conservancy	Aquatio	Ivaturai	
Setback from OHWM		Т			
<ul> <li>Play areas, picnic areas, and other water-related and water- enjoyment uses</li> </ul>	10'	10'	NA	NA	
<ul> <li>Access roads, parking<sup>1</sup> areas, restrooms, and nonwater- oriented accessory structures</li> </ul>	65'	65'	NA	NA	
<ul> <li>Vegetation conservation requirements</li> </ul>	See Section 4.5: Clearing, Grading, and Vegetation Conservation	See Section 4.5: Clearing, Grading, and Vegetation Conservation	NA	NA	
Height limits	35'	35'	3'	NA	
Residential Development (Dwellings)					
Setback from OHWM					
<ul> <li>Fences (parallel to shoreline) and auxiliary structures<sup>2</sup></li> </ul>	25'	NA	NA	NA	
<ul> <li>Primary and accessory structures, garages, drives, and parking areas<sup>3</sup></li> </ul>	65'	NA	NA	NA	
<ul> <li>Patios and decks<sup>4</sup> at grade</li> </ul>	50'	NA	NA	NA	
Building height limit above grade	35'	NA	NA	NA	
Fence (within 65' of OHWM) height limit above grade <sup>2</sup>	6'	NA	NA	NA	
Maximum building footprint <sup>5</sup> (percent of lot area landward of OHWM)	25%	NA	NA	NA	
Maximum impervious surface <sup>6</sup> (percent of lot area landward of OHWM)	35%	NA	NA	NA	
Vegetation conservation requirements	See Section 4.5: Clearing, Grading, and Vegetation Conservation	NA	NA	NA	

#### **ENVIRONMENTAL DESIGNATION**

	Shoreline Residential	Urban Conservancy	Aquatic	Natural		
Residential Docks						
Dock length <sup>7</sup>	NA	NA	35' or minimum necessary to provide 2' draft at low water (50' absolute maximum)	NA		
Maximum area coverage	NA	NA	300 SF	NA		
Dock height <sup>7</sup> above OHWM	3'	3'	3'	NA		
Structure height <sup>7</sup> above dock	42"	42"	42"	NA		
Minimum side yard setback <sup>7</sup>	10'	10'	10'	NA		
Maximum floating platform coverage <sup>8</sup>	NA	NA	64 SF	NA		

#### Notes:

- 1. See Section 5.2.3, "Recreational Development," Regulation 11.
- 2. See Section 5.3.3, "Residential Development," Regulation, 2.a and 2.b.
- 3. See Section 5.3.3, "Residential Development," Regulation, 2.d.
- 4. See Section 5.3.3, "Residential Development," Regulation, 2.c.
- 5. See Section 5.3.3, "Residential Development," Regulation, 1.b.
- 6. See Section 5.3.3, "Residential Development," Regulation, 1.c.
- 7. See Section 6.4.4, "Docks, Piers, and Floats," Regulation 11.b.
- 8. See Section 6.4.4, "Docks, Piers, and Floats," Regulation 11.a.

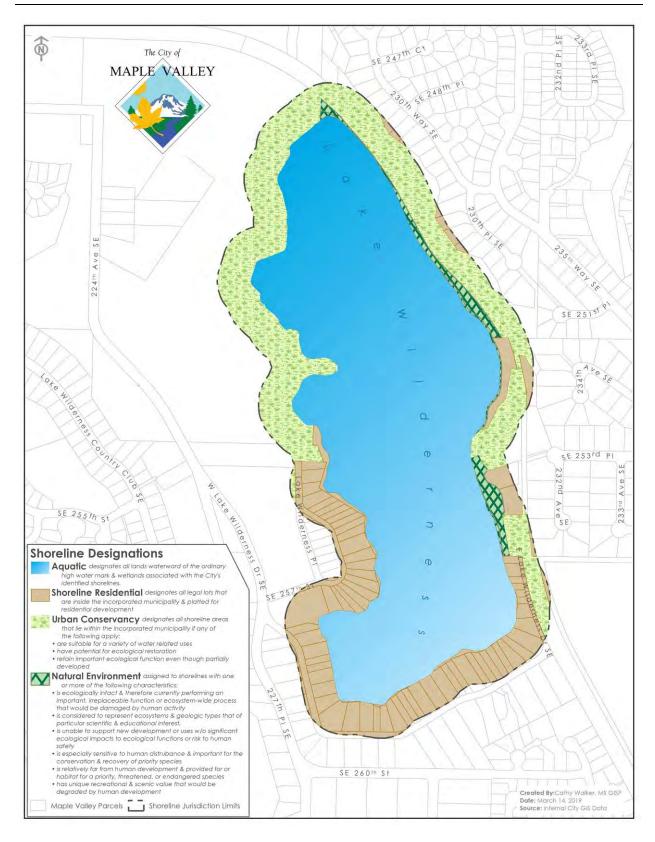


Figure 3.7-1: Shoreline Environment Designation for Lake Wilderness

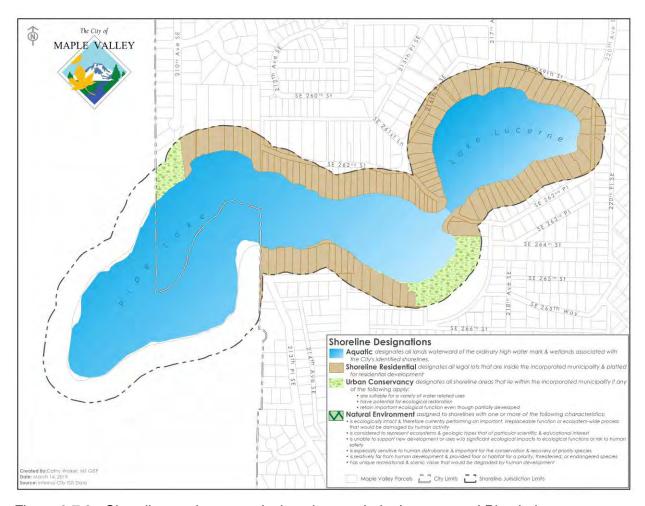


Figure 3.7-2. Shoreline environment designations on Lake Lucerne and Pipe Lake.

# 4. General Policies and Regulations

## 4.1 General

## 4.1.1 Applicability

The following provisions describe the requirements for all shoreline uses and modifications in all environment designation.

## 4.1.2 Policies

- The City will periodically review conditions on the shoreline and conduct appropriate
  analysis to determine whether or not other actions are necessary to protect and
  restore the ecology, protect human health and safety, upgrade the visual qualities,
  and enhance residential and recreational uses on the lake. Specific issues to
  address in such evaluations include, but are not limited to:
  - Water quality.
  - Conservation of aquatic vegetation (control of noxious weeds and enhancement of vegetation that supports more desirable ecological and recreational conditions).
  - · Upland vegetation.
  - Changing visual character as a result of new residential development, including additions, and individual vegetation conservation practices.
  - Use of Lake Wilderness Park.
- 2. The City will keep records of all project review actions within shoreline jurisdiction, including shoreline permits, letters of exemption, and building permits.
- 3. Where appropriate, the City will pursue the policies of this master program in other land use, development permitting, public construction, and public health and safety activities. Specifically, such activities include, but are not limited to:
  - Providing educational materials and opportunities regarding "best management practices" for shoreline protection.
  - Water quality and stormwater management activities, including those outside shoreline jurisdiction but affecting the shorelines of the state.
  - Aquatic vegetation management.
  - Health and safety activities, especially those related to sanitary sewage.
  - Public works and utilities development.

## 4.1.3 Regulations

- 1. All new shoreline uses and modifications, including those that do not require a shoreline permit, must conform to the policies and regulations of this master program and the provisions of the Shoreline Management Act, Chapter 90.58 RCW.
- 2. All new shoreline modifications must be in support of an allowable shoreline use that conforms to the provisions of this master program. Except as otherwise noted, all

shoreline modifications not associated with a legally existing or an approved shoreline use are prohibited.

- 3. Shoreline uses, modifications, and conditions listed as "prohibited" shall not be eligible for consideration as a shoreline variance or shoreline conditional use permit.
- 4. The "policies" listed in this master program will provide broad guidance and direction and will be used by the City in applying the "regulations." The policies, taken together, constitute the Shoreline Element of the Maple Valley Comprehensive Plan.
- 5. Where provisions of this master program conflict, the provisions most directly implementing the objectives of the Shoreline Management Act, as determined by the City, shall apply unless specifically stated otherwise.
- 6. See Section 7 for regulations, including exemptions, variances, conditional uses, and nonconforming uses.

# 4.2 Archaeological and Historic

# 4.2.1 Applicability

The following provisions apply to archaeological and historic resources that are either recorded at the Washington State Department of Archaeology and Historic Preservation and/or by local jurisdictions or have been inadvertently uncovered. Archaeological sites located both in and outside shoreline jurisdiction are subject to Chapter 27.44 RCW (Indian graves and records) and Chapter 27.53 RCW (Archaeological sites and records) and shall comply with Chapter 25-48 WAC as well as the provisions of this chapter.

## 4.2.2 Policies

- Due to the limited and irreplaceable nature of the resource, public or private uses, activities, and development should be prevented from destroying or damaging any site having historic, cultural, scientific or educational value as identified by the appropriate authorities.
- 2. The Lake Wilderness Lodge is a structure of historical and cultural significance and should be protected.
- 3. Educational displays and materials describing the significance of local archaeology and history is encouraged.

# 4.2.3 Regulations

- 1. All shoreline permits shall contain provisions which require developers to immediately stop work and notify the City, the affected tribe(s) and the Washington State Department of Archaeology and Historic Preservation if any resources of possible archaeological interest are uncovered during excavations. In such cases, the developer shall be required to provide for a site inspection and evaluation by a professional archaeologist to ensure that all possible valuable archaeological data are properly salvaged.
- 2. Permits issued in areas known to contain archaeological artifacts and data shall include a requirement that prior to ground disturbing activities the developer/property owner contact the City, Washington Department of Archaeology and Historic

Preservation and any affected tribes as well as provide for a site inspection and evaluation by a professional archaeologist. The permit shall require approval by the City before work can begin on a project following inspection. Significant archaeological data or artifacts shall be recovered before work begins or resumes on a project.

- 3. Significant archaeological and historic resources shall be permanently preserved for scientific study, education and public observation. When the City determines that a site has significant archaeological, natural, scientific or historical value, a substantial development permit shall not be issued which would pose a threat to the site. The City may require that development be postponed in such areas to allow investigation of public acquisition potential and/or retrieval and preservation of significant artifacts.
- 4. Archaeological sites located both in and outside the shoreline jurisdiction are subject to Chapter 27.44 RCW (Indian Graves and Records) and Chapter 27.53 RCW (Archaeological Sites and Records) and shall comply with Chapter 25-48 WAC as well as the provisions of this master program.
- 5. Archaeological excavations may be permitted subject to the provisions of this master program and all other applicable laws.
- Identified historical or archaeological resources shall be considered in park, open space, public access and site planning, with access to such areas designed and managed so as to give maximum protection to the resource and surrounding environment.
- 7. Clear interpretation of historical and archaeological features and natural areas shall be provided when appropriate.

## 4.3 Critical Areas

Critical areas in Maple Valley's shoreline jurisdiction include wetlands, streams, critical aquifer recharge areas, and geologically hazardous areas. Appendix A of this SMP includes detailed regulations for the protection of these critical areas and their buffers within shoreline jurisdiction in order to ensure no net loss of shoreline ecological function.

These critical areas regulations differ from the City's Critical Area Ordinance in that they do not include provisions that are inconsistent with the SMA or Shoreline Master Program Guidelines, such as a reasonable use exception and administrative exemptions.

# 4.4 Environmental Impacts

# 4.4.1 Applicability

The following policies and regulations apply to all uses and development in shoreline jurisdiction.

## 4.4.2 Policies

 In implementing this master program, the City will take necessary steps to ensure compliance with Chapter 43.21 RCW, the Washington State Environmental Policy Act of 1971, and its implementing guidelines.

- 2. All ecological impacts, as defined in the definitions, to the shoreline should be avoided or, if that is not possible, minimized to the maximum extent feasible.
- 3. Through the administration of this master program, the City will endeavor to:
  - Ensure no net loss of shoreline ecological functions.
  - Protect, preserve, and restore Maple Valley shorelines.
  - Preserve and enhance native vegetation to protect the natural functions and wildlife habitat of the City's shorelines.
  - Reduce/eliminate invasive exotic vegetation including aquatic and shoreline plants but excluding non-invasive ornamental cultivated settings on residential lots.
  - To preserve and improve the water quality of the City's lakes, creeks, and associated wetlands, continue to upgrade basic infrastructure systems or work with the appropriate utility providers to provide these services (such as sewer, water, and surface water runoff).
  - Maintain and enhance water quality for swimming and aquatic recreation.
  - Maintain and enhance water quality for habitat and aesthetic appeal.

## 4.4.3 Regulations

- Uses and developments on Maple Valley shorelines must be designed, located, sized, constructed and maintained to achieve no net loss of shoreline ecological functions necessary to sustain shoreline natural resources. Uses and developments must not have an unmitigated significant adverse impact on other shoreline functions fostered by this SMP.
- 2. All project proposals, including those for which a shoreline permit is not required, shall comply with Chapter 43.21c RCW, the Washington State Environmental Policy Act.
- 3. If a proposed shoreline use or modification is entirely addressed by specific, objective standards (such as setback distances, pier dimensions, or materials requirements) contained in this SMP, then the mitigation sequencing analysis described in subsection (4) is not required. In the following circumstances, the applicant must provide a mitigation sequencing analysis as described in subsection (4):
  - a. if a proposed shoreline use or modification is addressed in any part by discretionary standards (such as standards requiring a particular action if feasible or requiring the minimization of development size) contained in this Chapter, then the mitigation sequencing analysis is required for the discretionary standard(s);
  - b. when an action requires a Shoreline Conditional Use Permit or Shoreline Variance Permit; or
  - c. when specifically required by this SMP.
- 4. In order to ensure that development activities contribute to meeting the no net loss provisions by avoiding, minimizing, and mitigating for adverse impacts to ecological functions or ecosystem-wide process, an applicant is required to complete and apply mitigation sequencing according to the following order of priority, with (a) being top priority:

- a. Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.
- c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- d. Reducing or eliminating the impact over time by preservation and maintenance operations.
- e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
- f. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

The City will set mitigation requirements or permit conditions based on impacts identified. In determining appropriate mitigation measures, avoidance of impacts by means such as relocating or redesigning the proposed development will be applied first. Lower priority measure will be applied only after higher priority measures are demonstrated to be not feasible or not applicable. (See definition of "feasible" in Definitions.)

5. All shoreline development shall be located and constructed to avoid significant adverse impacts to human health and safety.

# 4.5 Clearing, Grading, and Vegetation Conservation

# 4.5.1 Applicability

The following provisions apply to any activity, development, or use which results in the removal of or impact to shoreline vegetation, whether or not that activity requires a shoreline permit. Such activities include clearing, grading, grubbing, and trimming of vegetation. These provisions also apply to vegetation protection and enhancement activities. Unless otherwise stated, vegetation conservation does not include those activities covered under the Washington State Forest Practices Act, except for conversion to other uses and those other forest practice activities over which local governments have authority. Like other master program provisions, vegetation conservation standards do not apply retroactively to existing uses and structures, such as existing agricultural practices.

Clearing and grading is an activity associated with developing property for a particular use including commercial, industrial, recreational, and residential. Specifically, "clearing" means the destruction or removal of vegetative ground cover, shrubs, and trees including, but not limited to, root material removal and/or topsoil removal. "Grading" means the movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land. Grading can also involve either the export of materials off-site, or the import of materials from an off-site source. Both of these activities may cause erosion, siltation, increased runoff, and habitat damage.

#### 4.5.2 Policies

- This master program, in conjunction with other City development regulations, should establish a coordinated and effective set of provisions and programs to protect and restore those functions and aesthetic qualities provided by shoreline vegetation and to ensure no net loss of shoreline ecological functions.
- 2. The restoration of vegetation should be a condition of all development that causes significant vegetation removal and nonwater-dependent development within shoreline areas where vegetation has been degraded from a natural state.
- 3. Restoration of degraded shorelines due to natural or man-made causes should, wherever appropriate, use soil bioengineering techniques to arrest the processes of erosion, sedimentation, and flooding.
- Aquatic weed management should stress prevention first. Where active removal or destruction is necessary, it should, whenever possible, minimize negative impacts to native plant communities and include appropriate handling or disposal of weed materials.

## 4.5.3 Regulations - General

- 1. All vegetation removal activities shall adhere to the requirements of the City's regulations pertaining to shoreline critical areas (Appendix A of this SMP), and clearing, grading, landscaping and tree retention (Chapter 18.40 MVMC), unless more restrictive standards are provided for in this Master Program. A shoreline exemption letter or substantial development permit are required unless otherwise stated in this section. Unless specified, the term vegetation includes trees.
- 2. Selective Vegetation Pruning. Pruning of existing trees and vegetation within the shoreline jurisdiction with hand labor and hand-operated equipment consistent with current International Society of Arboriculture (ISA) best management practices guidelines, in accordance with the Master Program is allowed without a shoreline permit or approval. A Clearing and Grading Permit and/or SEPA review may still be required. In no event may a tree or vegetation which is an active nest site for a species of local importance be pruned.
- 3. Removal of vegetation within areas classified as critical areas or critical area buffers under Appendix A of this SMP, or classified as shoreline setback under this SMP, is subject to the following provisions:
  - a. Removal of vegetation in such areas is prohibited unless such removal is determined to be necessary to support a water-oriented use, in connection with an approved alteration, to remove a documented hazard to existing development, or to remove noxious weeds as listed by the state in Chapter 16-750 WAC, and no other feasible alternative exists.
  - b. All vegetation removal in critical areas, critical area buffers, and shoreline setbacks shall document how they comply with all of the requirements of Appendix A and the mitigation sequence established in subsection (4) of Section 4.4.3 to ensure no net loss of ecological functions.

- c. Vegetation removed within the shoreline setback other than significant trees shall be replaced at a spatial ratio of 1:1 to replicate the structural habitat and ecological functions provided by native species. Significant trees shall be replaced according to subsection 4.5.4.
- d. All vegetation and significant trees removed from such areas shall be replaced within the same critical area, critical area buffer, or shoreline setback.
- e. New or expanded lawn areas within shoreline setbacks shall be prohibited.
- f. The City shall require a report prepared by a qualified professional to ensure impacts are mitigated.
- 4. Outside of areas classified as critical areas or critical area buffers under Appendix A of this SMP, or classified as shoreline setbacks under this SMP, removal of vegetation shall only be allowed in association with a permitted shoreline use or development, except that the following activities may be allowed independent of a permitted shoreline use or development:
  - a. Removal of noxious weeds as listed by the state in Chapter 16-750 WAC, provided such activity shall be conducted in a manner consistent with best management practices and the City of Maple Valley's engineering design standards, and native vegetation shall be promptly reestablished in the disturbed area.
  - b. Modification of vegetation in association with a legal, non-conforming use or development provided that said modification is conducted in a manner consistent with this Master Program and results in no net loss to ecological functions or critical fish and wildlife habitats. This could include, but is not limited to the maintenance of an existing developed yard and ornamental landscaping.
  - c. Normal and routine maintenance of existing trees, for view maintenance, safety, or other purposes, provided that said maintenance is consistent with accepted arboricultural practices, does not involve removal of healthy trees, and is not detrimental to the health of any trees.
  - d. Maintenance or restoration of view sheds situated on public lands provided that said activity is conducted in a manner consistent with this Master Program and results in no net loss to ecological functions or critical fish and wildlife habitat areas.
  - e. Areas cleared of vegetation and not developed shall be subject to the following provisions:
    - i. Such areas shall be replanted within one (1) year, and shall be planned and maintained such that, within three (3) years' time, the vegetation is at least ninety (90) percent reestablished.
    - ii. Areas cleared of native vegetation shall be replanted with similar species of native vegetation in quantities designed to achieve no net loss of ecological function. Areas cleared of ornamental landscapes, including grass, may be replanted with similar

species, unless mitigation is necessary to address project impacts. In all cases of revegetation, native vegetation shall be preferred.

- 5. The control of aquatic vegetation shall be subject to the following provisions:
  - a. Such activity shall only occur when native plant communities and associated habitats are threatened or where an existing water-dependent use is restricted by the presence of weeds.
  - b. Such activity shall occur in compliance with all other applicable laws and standards, including Washington Department of Fish and Wildlife requirements.
  - c. Control of aquatic vegetation by mechanical methods is exempt from the requirement to obtain a shoreline substantial development permit only if the bottom sediment or benthos is not disturbed in the process. It is assumed that mechanical removal of accumulated vegetation at a level closer than two (2) feet to the root level, including derooting or rotovating, will disturb the bottom sediment and benthos layer. Such methods shall be considered development for which a shoreline substantial development permit is required.
  - d. The use of herbicides and pesticides to remove noxious plants in rivers, streams, wetlands, or ditches shall be subject to the following provisions:
    - i. A permit from the Department of Ecology shall be required. Preparation of a SEPA checklist for review by other agencies may also be required.
    - ii. Mechanical removal of noxious weeds shall be timed and carried out in a manner to minimize any disruption of wildlife or habitat.
    - iii. The individual(s) involved shall obtain a pesticide applicator license from the Washington State Department of Agriculture.

# 4.5.4 Regulations - Tree Removal

1. When the removal of a healthy tree, or a tree deemed as diseased by a certified arborist that is not considered hazardous, is allowed pursuant to subsection 4.5.3.3 or 4.5.3.4, all significant trees removed shall be replaced in accordance with MVMC 18.40.130(J)(19), with the following minimum standards:

Significant Tree Removed	Replacement Ratio	
	(replaced: removed)	
12 – 16 inches	2:1	
16 – 24 inches	3:1	
Landmark Significant Tree	4:1	

2. The removal of trees that are determined by a certified arborist as hazardous, possible threat to public safety, or posing an imminent risk of damage to an existing

legally conforming structure, public or private road or sidewalk or other permanent improvement within the shoreline jurisdiction, is allowed subject to the following:

- a. Mitigation. The landowner shall replace any trees that are removed in accordance with MVMC 18.40.130(J)(19) at a one to one ratio (1:1) in shoreline jurisdiction.
- b. Wildlife snag as alternative to mitigation. A landowner may choose to convert a hazard tree proposed for removal to a wildlife snag as an alternative if recommended by a certified arborist.
- c. Within stream buffers, hazard trees shall be turned into snags if feasible, and/or resulting woody debris shall be put into the stream channel if it can be done in a manner that does not create a hazard on the site or to downstream properties.
- d. Native understory vegetation is preserved outside of areas used for structures and their maintenance, active recreation, and shoreline access.

## 4.6 Public Access

# 4.6.1 Applicability

Shoreline public access includes the ability of the general public to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline from adjacent locations. Public access facilities may include picnic areas, pathways and trails, floats and docks, promenades, viewing towers, bridges, boat launches, and improved street ends. On Maple Valley's shorelines, public access is provided primarily by Lake Wilderness Park and by private community parks on Lake Lucerne and Pipe Lake.

#### 4.6.2 Policies

- 1. Preserve and enhance the public access to Lake Wilderness, and ensure that public access improvements do not result in a net loss of shoreline ecological functions.
- 2. Provide public access to all Maple Valley shorelines, where appropriate.
- 3. Encourage inclusion of Maple Valley shoreline public access points in the City's non-motorized transportation plan.
- 4. Assure new public areas have adequate parking, located outside shoreline jurisdiction, where feasible.
- Public access should be considered in the review of all private and public developments (including land division) with the exception of one- and two-family dwelling units. Public access should be required when land is divided into more than four residential lots.
- Public access should be provided as close as possible to the water's edge without causing significant ecological impacts and should be designed in accordance with the Americans with Disabilities Act.

- 7. Public views from the shoreline upland areas should be enhanced and preserved. Enhancement of views should not be construed to mean excessive removal of vegetation that partially impairs views.
- 8. The public's opportunities to enjoy the physical and aesthetic qualities of the shorelines should be enhanced on public properties.
- 9. Public informational and educational displays to enhance the public's appreciation and enjoyment of the shorelines are encouraged.

## 4.6.3 Regulations

- 1. Public access shall be required for the following new shoreline uses and activities, except as designated in subsection 2:
  - a. Public entities, including the City of Maple Valley, shall be required to incorporate public access measures as part of each public shoreline development project;
  - b. Shoreline development that is not a water-oriented or other preferred use or activity, as designated by the SMA; or
  - c. Multi-family residential development, including land divisions creating more than four (4) lots.
- 2. An applicant shall not be required to provide public access if the Shoreline Administrator determines that one or more of the following conditions apply:
  - a. Safe, convenient, and adequate public access already exists in the general vicinity, and/or adequate public access is already documented at the property.
  - b. The site is part of a larger development project that has previously provided public access as part of the development permitting process.
  - c. The proposed development is for the subdivision of property into four or fewer parcels or involves the construction of four or fewer single-family or multi-family dwellings.
  - d. Unavoidable health or safety hazards to the public exist which cannot be prevented by any practical means;
  - The cost of providing the access, easement, or an alternative amenity, is unreasonably disproportionate to the total long term cost of the proposed development;
- 3. Development uses and activities on public lands shall be designed and operated to avoid blocking, reducing or adversely interfering with the public's physical access to the water and shorelines, unless such access would cause ecological impacts.
- 4. Public access provided by shoreline street ends, public utilities, rights-of-way, and other public lands shall not be diminished. (RCW 35.79.035 and RCW 36.87.130.)
- 5. Shoreline development (including land division into more than four lots) shall minimize impact to public views of shoreline waterbodies from public land or substantial numbers of residences.
- 6. Public access improvements shall result in no net loss of shoreline ecological functions. Mitigation sequencing as set forth in Section 4.4, Environmental Impacts,

shall be required. The City may request studies by qualified professionals to determine compliance with this requirement.

# 4.7 Water Quality

# 4.7.1 Applicability

The following policies apply to all development that affects water quality, as defined in Definitions, within Maple Valley shorelines. The following regulations apply to development in shoreline jurisdiction which may affect water quality as defined in Chapter 2, Definitions.

#### 4.7.2 Policies

- 1. All shoreline uses and activities should be located, designed, constructed and maintained to minimize adverse impacts to water quality and fish and wildlife resources including spawning, nesting, rearing, feeding areas and migratory uses.
- 2. The City should seek to improve water quality, quantity (the amount of water in a given system, with the objective of providing for ecological functions and human use), and flow characteristics in order to protect and restore ecological functions and ecosystem-wide processes of shorelines within shoreline jurisdiction. The City should implement this policy through the regulation of development and activities, through the design of new public works, such as roads, drainage, and water treatment facilities, and through coordination with other local, state, and federal water quality regulations and programs. The City should implement the City of Maple Valley Surface Water Management Program Plan, as updated and adopted by City ordinance.
- The City should require that new developments or expansions or retrofits of existing developments assess the effects of additional stormwater runoff volumes and velocities, and mitigate potential adverse effects on shorelines through design and implementation of appropriate stormwater management measures.
- 4. Construction and development activities should be conducted to minimize the effect on water quality from the addition of suspended solids, leaching of contaminants or disturbance of habitats and should be consistent with applicable regulatory agency requirements (e.g. Washington Department of Fish and Wildlife, Corps of Engineers).

# 4.7.3 Regulations

- 1. The design, construction and operation of shoreline uses and developments shall incorporate measures to protect and maintain surface and groundwater quantity and quality in accordance with all applicable laws, so that there is no net loss of ecological functions.
- 2. The design, construction and operation of shoreline uses and developments shall incorporate measures to protect and maintain surface and groundwater quantity and quality in accordance with all applicable laws, so that there is no net loss of aesthetic qualities (e.g., water color) or recreational opportunities (e.g., safe swimming and fishing).
- All shoreline development, both during and after construction, shall avoid and minimize any increase in surface runoff through control, treatment and release of

surface water runoff so the receiving water quality and shore properties and features are not adversely affected. Control measures include, but are not limited to, dikes, catch basins or settling ponds, oil interceptor drains, grassy swales, and planted buffers.

- 4. All shoreline development shall comply with the applicable requirements of the most recent edition of the Adopted Surface Water Design Manual and all applicable City stormwater regulations. The City will also rely on source control standards and other BMPs contained in the most recent versions of the Department of Ecology Stormwater Management Manual for Western Washington and The Low Impact Development Manual: Technical Guidance for Puget Sound.
- 5. Property owners with failing septic systems and applicants seeking required building, land use and shoreline permits for a major redevelopment shall be required to connect to the public sewer if such connection can be made within 300 feet of the subject property.
- 6. All materials that may come in contact with water shall be constructed of materials, such as untreated wood, concrete, approved plastic composites or treated steel, that will not adversely affect water quality or aquatic plants or animals. Materials shall not be treated with pentachlorophenol, creosote, chromate copper arsenate (CCA), or comparably toxic compounds as outlined in the latest edition of the Western Wood Preservers Institute Best Management Practices for the Use of Treated Wood in Aquatic and Sensitive Areas. Structures may also use other materials approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave or boat wake splash, rain or runoff.
- 7. Waterfront trails shall be located not to degrade the shoreline ecology. Trails shall be located at least sixty five (65) feet from the ordinary high water mark, except in limited areas to provide viewpoints or conform to topography.

# 5. Shoreline Use Policies and Regulations

# 5.1 Boating Facilities

## 5.1.1 Applicability

Boating facilities include public or private dry storage and wet-moorage facilities and structures; boat launch ramps, covered moorage, boat houses, mooring buoys, and marine travel lifts. Boating facilities as defined in this SMP include commercial or non-commercial moorage facilities serving more than four (4) single-family residences.

Accessory uses found in boating facilities may include fuel docks and storage, boating equipment sales and rental, wash-down facilities, fish cleaning stations, repair services, public launching, bait and tackle shops, potable water, waste disposal, administration, parking, groceries and dry goods.

There are uses and activities associated with boating facilities that are identified in this section as separate shoreline modifications (e.g., Docks, Piers, and Floats – Section 6.4; Shoreline Stabilization [Including Bulkheads] – Section 6.3; Dredging and Dredge Material Disposal – Section 6.6; and Fill and Excavation – Section 6.7). These uses are subject to the regulations established for those uses and modifications in addition to the standards for boating facilities established in this section.

#### 5.1.2 Policies

- 1. New boating facilities should not be allowed.
- 2. Existing public moorage and launching facilities should be maintained.
- 3. Boating facilities should be allowed to be located and designed to ensure no net loss of ecological functions or other significant adverse impacts, and should, where feasible, enhance degraded or scarce shoreline features. Existing boating facilities should be allowed to be relocated, redeveloped, and expanded in accordance with the provisions of the SMP.
- 4. Boating facilities should be located and designed so their structures and operations will be aesthetically compatible with the area visually affected and will not unreasonably impair shoreline views. However, the need to protect and restore ecological functions and to provide for water-dependent uses carries higher priority than protection of views.
- 5. Boating facilities should not unduly obstruct navigable waters.

## 5.1.3 Regulations

- 1. New boating facilities are prohibited.
- 2. Existing boating facilities may be maintained, relocated, redeveloped, and expanded in accordance with the provisions of this master program.

- 3. It is the applicant's responsibility to comply with all other applicable state agency policies and regulations, including, but not limited to the following: the Department of Fish and Wildlife criteria for the design of bulkheads and landfills; Federal Marine Sanitation standards (EPA 1972) requiring water quality certification from the U.S. Army Corps of Engineers (Section 10); U.S. Army Corps of Engineers dredging standards (Section 404); and state and federal standards for the storage of fuels and toxic materials.
- 4. Boating facilities shall be located where such development can comply with the requirement for no net loss of ecological functions, and where existing navigation rights and channels can be protected.
- 5. Boating facilities shall have provisions available for cleanup of accidental spills of contaminants.
- 6. Boat launch ramps shall, where feasible, be located where:
  - a. There are stable, non-erosional banks, where no or a minimum number of current deflectors or other stabilization structures will be necessary.
  - b. Water depths are adequate to eliminate or minimize the need for offshore channel construction dredging, maintenance dredging, spoil disposal, filling, beach enhancement, and other river, lake, harbor, and channel maintenance activities.
  - c. There is adequate water mixing and flushing, and the facility is designed so as not to retard or negatively influence flushing characteristics.
- Boat launch ramps shall be placed and kept as flush as possible with the foreshore slope to permit launch and retrieval and to minimize the interruption of hydrologic processes.
- 8. Live aboard vessels, crafts and/or structures are prohibited.
- Extended moorage on waters of the state without a lease or permission is prohibited, except as allowed by applicable state regulations and unless a lease or permission is obtained from the state and impacts to navigation and public access are mitigated.

# **5.2 Recreational Development**

# 5.2.1 Applicability

Recreational development provides opportunities for the refreshment of body and mind through forms of play, sports, relaxation, amusement or contemplation. It includes facilities for passive recreational activities such as hiking, photography, viewing and fishing. It also includes facilities for active or more intensive uses such as parks, campgrounds, golf courses and other outdoor recreation areas. This section applies to both publicly and privately owned shoreline facilities intended for use by the public or a private club, group, association or individual, excluding private residences.

#### 5.2.2 Policies

- Recreational uses and facilities should be designed to be primarily related to access (visual and physical), enjoyment and use of the water and shorelines of the state. Water-dependent and water-related recreational uses should be given priority over non-water-oriented recreational uses.
- 2. Maintain and enforce the policy of no combustion engines on Lake Wilderness, Pipe Lake, and Lake Lucerne.
- 3. Encourage and promote the recreational use of Maple Valley shorelines.
- 4. Recreational developments should be located, designed, and operated to be consistent with the purpose of the environment designation in which they are located and such that no net loss of shoreline ecological functions or ecosystem-wide processes.
- 5. Promote the linkage of shoreline parks, recreation areas, and public access points with hiking and bicycle paths.
- 6. All recreational developments should make adequate provisions for:
  - a. Vehicular and pedestrian access, both on-site and off-site.
  - b. Proper water supply.
  - c. Solid and sewage waste disposal methods.
  - d. Security and fire protection.
  - e. Surface water runoff treatment.
  - f. The prevention of trespass onto adjacent properties, including, but not limited to, landscaping, fencing, and posting of property.
  - g. Buffering such development from adjacent private property or natural area.
- 7. Trails and pathways should be located, designed, and maintained to protect bank stability.
- 8. Pursue opportunities for incorporating educational and interpretive displays as part of recreational development.

# 5.2.3 Regulations

- Proposals for new or expanded recreational development shall include provisions for public access to the shoreline. Public access sites shall comply with the requirements of Section 4.7, Public Access. New or expanded recreational development that does not provide public access may be authorized provided the applicant demonstrates compliance with Section 4.7, Public Access.
- Recreational developments, uses, and activities shall be designed and operated to avoid blocking, reducing, or adversely interfering with the public's visual or physical access to the water and the shorelines. In providing visual access to the shoreline, the natural vegetation shall not be excessively removed either by clearing or by topping.

- 3. All new structures associated with a recreational development, other than water-dependent structures such as docks and boardwalks that provide access to the water for that development, shall maintain the required shoreline setback and building setback as set forth in Section 3.7 of this master program. Existing structures may be replaced in their existing location and configuration to the extent allowed by local, state, and federal agencies with jurisdiction. Shoreline setback reduction beyond that allowed under Section 3.7 of this master program shall require a shoreline variance.
- 4. Recreational development shall be located, designed, and constructed to result in no net loss of shoreline ecological functions, including protection of existing native shoreline vegetation and restoration of native shoreline vegetation impacted by development activities. Mitigation shall be provided as necessary to meet this requirement. The City may request studies by qualified professionals to determine compliance with this requirement.
- 5. Water-dependent or water-related activities such as swimming, boating, and fishing, and activities that benefit from waterfront scenery such as picnicking, hiking, and bicycling, shall be given priority in planning public and private recreational development in shoreline jurisdiction.
- 6. Recreational development shall make adequate provisions for, as applicable:
  - a. Motorized, non-motorized, and pedestrian access;
  - b. The prevention of trespass onto adjacent properties, using mechanisms including but not limited to landscaping and fencing;
  - c. Protection and restoration of critical areas and shoreline processes and functions;
  - d. Signs indicating the public's right of access to shoreline acres, installed and maintained in conspicuous locations at the point of access and entrance; and
  - e. Buffering of such development from adjacent private property or natural areas.
- 7. In approving recreational development, the City shall ensure that the development will maintain, enhance, or restore desirable shoreline features.
- 8. Swimming areas shall be separated from boat launch areas.
- 9. Fragile and unique shoreline areas with valuable ecological functions, such as wetlands and wildlife habitats, shall be used only for non-intensive recreation activities that do not involve the construction of structures.
- 10. Recreational developments that require periodic use of fertilizers, pesticides, and other chemicals, such as golf courses and playfields, or that support high-intensity activities such as sporting events as a primary use, shall be located outside of shoreline jurisdiction whenever feasible. Development of such recreational facilities within shoreline jurisdiction is subject to the following requirements:
  - a. The applicant shall submit plans demonstrating the methods to be used to prevent fertilizer and herbicide applications and resultant leachate from entering adjacent water bodies.

- b. Buffer strips of native vegetation along the shoreline shall be included in the development. The City shall determine the maximum width necessary for buffer strips but in no case shall the buffer strip be less than 25 feet.
- 11. Substantial accessory use facilities, such as rest rooms, recreation halls and gymnasiums, commercial services, access roads and parking areas shall be setback from the ordinary high water mark (OHWM) outside the shoreline jurisdiction unless the City determines that such facilities are water-dependent or water-enjoyment uses or that they are necessary in close proximity to the shorelines to support such uses. Access for boat launches, picnic shelters, and other water-oriented recreational facilities may be located within sixty-five (65) feet of the OHWM.

#### 12. Trails

- a. Trails shall be designed to avoid significant impacts to sensitive natural systems and shall result in no net loss of ecological functions. Mitigation sequencing as set forth in Section 4.4, Environmental Impacts, shall be required.
- b. Trails shall be located at least sixty five (65) feet from the ordinary high water mark, except in limited areas to provide viewpoints or conform to topography. Publicly accessible trails shall meet the applicable provisions of Section 4.7, Public Access.
- c. Trails not intended for public access shall be limited to non-motorized, pervious trails, including boardwalks, no greater than six (6) feet wide.
- 13. Whenever financially feasible and practical, the City shall require the use of building materials and technologies whose production and use result in reduced environmental impacts when developing public access to the shoreline. Porous pavements shall be used unless the applicant demonstrates to the satisfaction of the Shoreline Administrator that such materials would restrict accessibility, pose a safety hazard, or are not sufficiently durable.

# 5.3 Residential Development

# 5.3.1 Applicability

Residential development means one or more buildings, structures, lots, parcels or portions thereof which are designed for and used or intended to be used to provide a place of abode, including single-family residences, duplexes, other detached dwellings, floating homes, multifamily residences, mobile home parks, subdivisions, and short subdivisions, together with accessory uses and structures normally applicable to residential uses, including, but not limited to, garages, sheds, tennis courts, swimming pools, parking areas, fences, cabanas, saunas, and guest cottages. Residential development does not include hotels, motels, or any other type of overnight or transient housing or camping facilities.

## 5.3.2 Policies

- 1. Residential development should be designed to be compatible with environmental conditions and to ensure no net loss of shoreline ecological function.
- Recognizing the single-purpose, irreversible, and space consumptive nature of shoreline residential development, new development should provide adequate setbacks and buffer areas from the water to protect or restore ecological functions and ecosystem-wide processes, to preserve views, and to minimize use conflicts.

- 3. Require residential development to make adequate provision for wastewater, water, and stormwater facilities and apply best management practices to protect shoreline water quality and meet the needs of the development.
- 4. New residences should be designed and located so that shoreline stabilization will not be necessary to protect the structure. The creation of new residential lots should not be allowed unless it is demonstrated the lots can be developed without:
  - a. Constructing shoreline stabilization structures.
  - b. Causing significant erosion or slope instability.
  - c. Requiring more than 35 percent of the site to be covered with structures or pavements (including gravel pavements).

## 5.3.3 Regulations

- 1. New residential development shall adhere to the following standards:
  - a. All new structures associated with a residential development, other than waterdependent structures such as docks, shall maintain the required shoreline setback and building setback as set forth in Section 3.7 of this master program.
  - b. Maximum building footprint area: The maximum area of the building footprint including all enclosed and covered structures (such as garages, covered porches, or impervious decks) shall be 25 percent of the lot area landward of the OHWM. For lots existing at the time of the master program's adoption less than 8,000 square feet in size, the maximum allowable footprint area may be up to 2,000 square feet irrespective of the percentage of lot coverage.

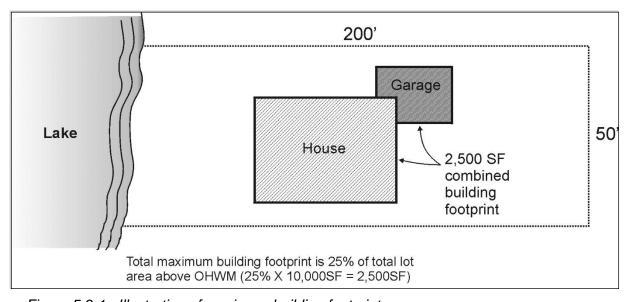


Figure 5.3-1. Illustration of maximum building footprint.

c. Maximum amount of impervious surface: The maximum amount of impervious surface for each lot, including structures and pavement (including gravel surfaces) shall be no greater than 35 percent of the total lot area landward of the OHWM. For lots existing at the time of the master program's adoption less than 8,000 square feet in size, the maximum area of impervious surfaces may be up to 2,750 square feet irrespective of the percentage of impervious surface.

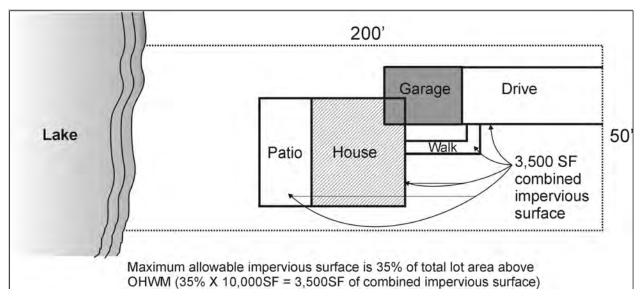


Figure 5.3-1. Illustration of maximum impervious surface.

- d. Height: The maximum height of the structure above the average grade level of the building footprint is 35 feet. See definitions for "Height" and "Average grade level."
- e. Also see Section 6.3, Shoreline Stabilization, and Section 6.4, Docks, Piers, and Floats for regulations related to those structures.
- 2. The following standards apply to accessory uses and structures for new and existing residences. (See Figure 5.3-3)
  - a. Fences:
    - i. Fences within 65 feet of the OHWM shall be no more than 6 feet high
    - ii. Fences aligned roughly parallel to the shoreline and within 65 feet of the OHWM shall be no more than 6 feet high and shall be set back at least 25 feet from the OWHM.
    - iii. Fences along a property line running roughly perpendicular to the shoreline may extend to the OHWM.
  - b. Accessory structures, including storage sheds, gazebos, and constructed play areas:
    - i. No more than one such accessory structure may be located within 65 feet of the OHWM. The structure may not be more than 120 square feet in building footprint or more than 12 feet in height and must be set back at least 25 feet from the OHWM.
    - ii. Accessory uses and structures shall be reasonable in size and purpose and compatible with on-site and adjacent structures, uses, and natural features. The City shall determine the reasonableness and compatibility based on local conditions.
  - c. Patios and decks:

- i. Patios or decks no more than 1 foot above average grade level may be located within 50 feet of the OHWM, provided they comply with provisions for vegetation conservation and water quality, are pervious (allow water to percolate into the soil, and the total amount of all impervious surfaces within 50 feet of the OHWM does not exceed 120 square feet.
- ii. Raised patios and decks greater than 1 foot above average grade level shall be set back at least 65 feet from the OHWM.
- d. Garages and pavements for motorized vehicles (drives and parking areas) shall be set back 65 feet from the OHWM.

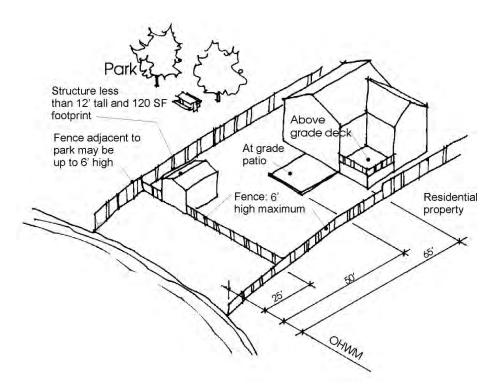


Figure 5.3-3. Illustration of residential development setback and size standards.

- 3. The creation of new residential lots shall be prohibited unless the applicant demonstrates that all of the provisions of this master program, including setback and size restrictions, can be met on the proposed lot. Specifically, it must be demonstrated that:
  - a. The creation of new residential lots will result in no net loss of shoreline ecological functions at full build-out.
  - b. The residence can be built in conformance with all applicable setbacks and development standards in this master program, and will not require shoreline modification to resist erosion.
  - c. Adequate water, sewer, road access, and utilities can be provided.

- d. The intensity of development is consistent with the City's comprehensive plan.
- e. The development will not cause flood or geological hazard to itself or other properties.
- 4. New multi-unit residential development, including the subdivision of land into more than four (4) parcels, shall provide community and/or public access in conformance with the provisions of Section 4.7, Public Access.
- Residential development shall result in no net loss of shoreline ecological functions.
   Mitigation sequencing as set forth in Section 4.4, Environmental Impacts, shall be required. The City may request studies by qualified professionals to determine compliance with this requirement.
- 6. The stormwater runoff for all new or expanded pavements or other impervious surfaces associated with residential development shall be directed to infiltration systems, and other Low Impact Development techniques shall be incorporated into new development as feasible, in accordance with the City's adopted Surface Water Design Manual and the Low Impact Development Technical Guidance Manual for Puget Sound.
- 7. The total amount of open decks and lawn areas within shoreline jurisdiction shall be no more than 20 percent of the lot area that is within shoreline jurisdiction. Those areas not either impervious surfaces or lawns or decks should be planted with trees, shrubs, or ground covers. Native vegetation is highly recommended because it does not generally require the quantity of fertilizers and pesticides that ornamental plantings do.
- 8. New overwater homes, including floating homes, are prohibited.
- 9. Existing Residential Structures. Legally established existing residential structures and appurtenances located landward of the OHWM and outside of the floodway that do not meet the standards of this master program, including those set waterward of the shoreline setback, are considered to be conforming. However, an application to replace an existing residential structure must meet all setback, height, and other construction requirements of the master program and the SMA.
  - a. A one (1) time expansion is allowed, as follows:
    - i. The expansion is no more than twenty-five percent (25%) of the habitable floor area of the existing residence;
    - ii. The expansion does not exceed the allowed height limit;
    - iii. The expansion is no farther waterward than the existing structure; and
    - iv. The applicant demonstrates that the expansion will result in no net loss of shoreline ecological functions.
  - b. If a structure or development is damaged by fire, flood, explosion, or other natural disaster, it may be restored or reconstructed to those configurations existing at the time of such damage, provided:
    - The reconstructed or restored structure will not cause additional adverse effects to adjacent properties or to the shoreline environment;

- ii. The rebuilt structure or portion of structure shall not expand the original footprint or height of the damaged structure;
- No degree of relocation shall occur, except to increase conformity or to increase ecological function, in which case the structure shall be located in the least environmentally damaging location possible;
- iv. The submittal of applications for permits necessary to restore the development is initiated within twelve (12) months of the damage. The Shoreline Administrator may waive this requirement in situations with extenuating circumstances;
- v. The reconstruction is commenced within one (1) year of the issuance of permit;
- vi. The Shoreline Administrator may allow a one (1) year extension provided consistent and substantial progress is being made; and
- vii. Any residential structures, including multifamily structures, may be reconstructed up to the size, placement and density that existed prior to the damage, so long as other provisions of this master program are met.

# 5.4 Transportation Facilities

# 5.4.1 Applicability

Transportation facilities are those structures and developments that aid in land and water surface movement of people, goods and services. They include roads and highways, bridges and causeways, bikeways, trails, railroad facilities, ferry terminals, float plane terminals, heliports and other related facilities.

#### 5.4.2 Policies

- 1. New roads, railroads and bridges in shoreline jurisdiction should be prohibited unless no other feasible alternative exists. When permitted, new roads, railroads, and bridges should be located as far landward from the shoreline as possible.
- 2. Design, implement, and locate new roads, railroads, and parking facilities in such a manner as to result in no net loss of shoreline ecological function.
- 3. Trail and bicycle paths should be encouraged in shoreline jurisdiction where they are compatible with the natural character, resources and ecology of the shoreline.
- 4. Joint use of transportation corridors within shoreline jurisdiction for roads, utilities and motorized forms of transportation should be encouraged.
- 5. Abandoned or unused road or railroad corridors and rights-of-way which offer opportunities for public access to the water should be acquired and/or retained for such use.

# 5.4.3 Regulations – General

- New road and bridge construction in shoreline jurisdiction shall be avoided and minimized and allowed only when related to and necessary for the support of permitted shoreline activities.
- 2. Transportation facilities shall result in no net loss of shoreline ecological functions and no adverse impacts on existing or planned water-dependent uses. Mitigation

- sequencing as set forth in Section 4.4, Environmental Impacts, shall be required. The City may request studies by qualified professionals to determine compliance with this requirement.
- 3. Applicants for new transportation facilities shall demonstrate how such facilities have been planned, located, and designed where routes will have the least possible adverse effect on unique or fragile shoreline features.
- 4. New water crossings associated with transportation uses shall be avoided if possible and minimized in number and total area impacted (e.g. using perpendicular crossings). Culverts and bridges shall be designed to allow passage of adult and juvenile salmon pursuant to WDFW Fish Passage Guidelines and to accommodate the flow of water, sediment, and woody debris during the 100 year return storm event.
- 5. Where feasible, transportation and primary utility facilities shall be required to make joint use of rights-of-way and to consolidate crossings of water bodies to minimize adverse impacts to the shoreline.
- 6. New transportation facilities shall be located and designed to prevent or minimize the need for shoreline protective measures such as riprap or other bank stabilization, fill, bulkheads, groins, jetties or substantial site grading.
- 7. Transportation facilities and services shall utilize existing transportation corridors to the extent possible, provided that facility additions and modifications will not adversely impact shoreline resources and are otherwise consistent with this master program. If expansion of the existing corridor will result in significant adverse impacts, then a less disruptive alternative shall be utilized.
- 8. Fill for transportation facility development is prohibited in water bodies, wetlands and on accretion beaches, except when all structural and upland alternatives have been proven infeasible and the transportation facilities are necessary to support uses consistent with this master program, such fill may be allowed with a conditional use permit.
- 9. RCW 37.79.035 and RCW 35.87.130 prohibits the City from vacating any City road which abuts a body of salt or fresh water unless the street or road is not currently used or suitable for boat moorage or launching site or for a park, viewpoint, recreation, education or other public purposes (see RCW legal procedure to vacate streets).
- 10. Float plane and heliport facility services are prohibited.
- 11. Transportation facilities, except for non-motorized vehicle trails, are prohibited in geologically hazardous areas, such as steep slopes, or areas with soils subject to severe erosion or landslides. See Appendix A, Shoreline Critical Areas Regulations, for regulations related to geologically hazardous areas.

# 5.4.4 Regulations - Roads

 Expansion of existing roadways may be permitted only when the applicant demonstrates that:

- a. No alternative route is feasible;
- b. The roadway is constructed and maintained to cause the least possible adverse impact on the land and water environment; and
- c. The roadway expansion is in the public interest.
- Where new roads are proposed, applicants shall demonstrate that efforts have been made to coordinate with existing land use plans, including the City's Comprehensive Plan and this master program.
- 3. Streets within shoreline jurisdiction shall be designed with the minimum pavement area required. Gravel and more innovative materials shall be used where feasible for pathways and road shoulders to minimize the amount of impermeable surfaces and help to maintain a more natural appearance.
- 4. Roads shall be designed to provide safe pedestrian and non-motorized vehicular crossings where public access to shorelines is intended.
- 5. The City shall give preference to mechanical means for roadside brush control on roads in shoreline jurisdiction rather than the use of herbicides.

## 5.4.5 Regulations – Parking

- 1. Parking facilities shall be located outside of shoreline jurisdiction except to support an authorized shoreline use. Parking as a primary use shall be prohibited in shoreline jurisdiction.
- 2. Parking facilities shall provide adequate provisions to control surface water runoff to prevent it from contaminating water bodies.
- 3. Parking facilities serving individual buildings on the shoreline shall be located landward from the principal building being served, except when the parking facility is within or beneath the structure and adequately screened or in cases when an alternate orientation would have less adverse impact on the shoreline.
- 4. Exterior parking facilities shall be designed and landscaped to minimize adverse impacts upon adjacent shoreline and abutting properties. Exterior parking facilities for nonresidential uses shall be landscaped with vegetation in such a manner that plantings provide effective screening within three years of project completion.
- 5. New and reconstructed parking areas within the Urban Conservancy shoreline environment shall utilize Low Impact Development (LID) techniques as appropriate and as described in the most recent edition of the Low Impact Development Manual: Technical Guidance for Puget Sound.

# 5.5 Utilities, Primary and Accessory

# 5.5.1 Applicability

Utility development includes facilities that produce, transmit, carry, store, process or dispose of electric power, gas, water, sewage, communications, oil and the like. The provisions in this section apply to primary use activities such as solid waste handling and disposal, sewage

treatment plants and outfalls, public and private high-tension utility lines on public property or easements, power generating or transfer facilities, gas distribution lines and storage facilities. See Section 4.8, Utilities, Accessory, for on-site accessory use utilities.

Solid waste disposal means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid or hazardous waste on any land area on or in the water.

Solid waste includes all putrescible and nonputrescible solid and semisolid wastes, including garbage, rubbish, ashes, industrial wastes, wood wastes and assorted yard wastes associated with commercial logging activities, swill, demolition and construction wastes, abandoned vehicles and parts of vehicles, household appliances and other discarded commodities.

Accessory utilities are those that effect small-scale distribution services connected directly to the uses along the shoreline. For example, power, telephone, cable, water and sewer lines, including stormwater systems, are all considered as utilities accessory to shoreline uses. They are addressed in this section because they concern all types of development and have the potential to impact the quality of the shoreline and its waters.

#### 5.5.2 Policies

- Utilities should utilize existing transportation and utility sites, rights-of-way and corridors whenever possible, rather than creating new corridors. Joint use of rightsof-way and corridors should be encouraged.
- 2. Utilities should be located outside of shoreline jurisdiction unless alternative locations are infeasible, the utility requires a shoreline location, or the utility is necessary to support an approved shoreline use.
- 3. Existing utility services routed through shoreline jurisdiction shall not be a sole justification for more intense development.
- 4. Utility facilities and corridors should be located so as to protect scenic views, to preserve the natural landscape, to minimize conflicts with present and planned land use, and to ensure no net loss of shoreline ecological functions. Whenever possible, such facilities should be placed underground and alongside or under culverts and bridges.
- Utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities, which are nonwater-oriented should not be allowed in shoreline areas unless it can be demonstrated that no other feasible option is available.
- 6. Accessory utilities should be properly installed so as to protect the shoreline and water from contamination and degradation.
- 7. Accessory utility facilities and rights-of-way should be located outside of shoreline jurisdiction unless alternative locations are unfeasible, the utility requires a shoreline location, or the utility is necessary to support an approved shoreline use.
- 8. Accessory utility facilities should be designed and located in a manner which preserves the natural landscape and shoreline ecological processes and functions and minimizes conflicts with present and planned land uses.

## 5.5.3 Regulations - Primary Utilities

- Major utilities shall be located outside of shoreline jurisdiction unless no other feasible alternative exists. When allowed under this regulation, major utilities shall be located landward of the ordinary high water mark, unless such location is not feasible or would result in potentially greater environmental impacts.
- 2. Where major facilities must be placed in a shoreline area, the location and design shall be chosen so as not to destroy or obstruct scenic views.
- 3. Utility facilities shall be located, designed, and constructed to avoid disturbance of unique and fragile areas, including wildlife spawning, nesting, and rearing areas. Utility facility development shall result in no net loss of shoreline ecological functions. Mitigation shall be provided as necessary to meet this requirement, with consideration given to ongoing impacts, such as permanent restrictions on vegetation growing under transmission lines or within utility corridors.
- 4. Utility development shall, through coordination with local government agencies, provide for compatible, multiple use of sites and rights-of-way. Such uses include shoreline access points, trail systems and other forms of recreation and transportation, providing such uses will not unduly interfere with utility operations, endanger public health and safety, or create a significant and disproportionate liability for the owner.
- 5. Utility lines shall utilize existing rights-of-way, corridors and/or bridge crossings whenever possible and shall avoid duplication and construction of new or parallel corridors in all shoreline areas. Proposals for new corridors or water crossings must fully substantiate the unfeasibility of existing routes.
- 6. New utilities noted in "a" through "d" below are not allowed in shoreline jurisdiction unless authorized by conditional use permit:
  - a. Water system treatment plants;
  - b. Sewage system lines, interceptors, pump stations and treatment plants;
  - c. Electrical energy generating plants, substations, lines and cables; and
  - d. Petroleum and gas pipelines.

Exceptions to this include new residential connections to the sewer system or improvements to the existing system.

- 7. Repair, maintenance, and protection of existing utility lines is a permitted use.
- 8. New solid waste disposal sites and facilities are prohibited. Storage of recyclable materials shall not be considered solid waste disposal.
- 9. New utility lines including, electricity, communications and fuel lines, shall be located underground, except where the presence of bedrock or other obstructions make such placement infeasible. If there are no existing underground utility connections, individual service lines to existing residences may be located above grade.

- 10. Existing above-ground utility lines should be moved underground during normal replacement processes where practical.
- 11. New utility developments shall be located and designated so as to avoid or minimize the use of any structural or artificial shore defense or flood protection works.
- 12. All underwater pipelines transporting liquids intrinsically harmful to aquatic life or potentially injurious to water quality are prohibited, unless no other alternative exists. In those limited instances when permitted by conditional use, automatic shut-off valves shall be provided on both sides of the water body.
- 13. Clearing of vegetation for the installation or maintenance of utilities shall be kept to a minimum and upon project completion any disturbed areas shall be restored to their pre-project condition or better consistent with Section 4.5, Clearing, Grading, and Vegetation Conservation.
- 14. Applications for installation of utility facilities shall include the following:
  - a. Description of the proposed facilities;
  - b. Reason(s) why the utility facility requires a shoreline location;
  - c. Alternative locations considered and reasons for their elimination;
  - d. Location of other utility facilities in the vicinity of the proposed project and any plans to include the facilities of other types of utilities in the project;
  - e. Plans for reclamation of areas disturbed both during construction and following decommissioning and/or completion of the primary utility's useful life;
  - f. Plans for control of erosion and turbidity during construction and operation; and
  - g. Identification of any possibility for locating the proposed facility at another existing utility facility site or within an existing utility right-of-way.
- 15. In the case of a new primary utility corridor serving multiple municipalities and districts, the determination as to the feasibility of alternative routes outside of shoreline jurisdiction and/or the possibility of using existing rights-of-way may include, but is not limited to, consideration of:
  - a. Construction impacts on the community, including impacts on traffic and adjacent land uses:
  - b. Engineering considerations, including restoration or disruption issues related to the presence of existing public improvements and utility facilities;
  - c. Environmental considerations, including impacts on the ecological function both within and outside of shoreline jurisdiction; and
  - d. Project considerations, including construction cost, construction schedule, and expenditures or contractual commitments made by the proponent of the corridor, prior to the adoption of this Master Program, in acquiring rights for the proposed route.

# 5.5.4 Regulations – Accessory Utilities

1. Accessory utility development shall, through coordination with government agencies, provide for compatible multiple use of sites and rights-of-way. Such uses include shoreline access points, trails and other forms of recreation and transportation

- systems, providing such uses will not unduly interfere with utility operations, endanger public health and safety, or create a significant and disproportionate liability for the owner.
- Utility lines shall utilize existing rights-of-way, corridors, and/or bridge crossings
  whenever possible and shall avoid duplication and construction of new corridors in all
  shoreline areas. Proposals for new corridors or water crossings shall fully
  substantiate the infeasibility of existing routes.
- 3. Utility facilities shall be located, designed, and constructed to avoid disturbance of unique and fragile areas, including wildlife spawning, nesting, and rearing areas. Utility facility development shall result in no net loss of shoreline ecological functions. Mitigation shall be provided as necessary to meet this requirement, with consideration given to ongoing impacts, such as permanent restrictions on vegetation growing under transmission lines or within utility corridors.
- 4. Whenever utility lines must be placed in a shoreline area the location shall be chosen so as not to obstruct or destroy scenic views, and shall avoid disruptions to public recreation areas and significant natural, historic, archaeological or cultural sites. Utilities should be encouraged to place the lines underground wherever feasible.
- Sites disturbed for utility installation shall be stabilized during and following construction to avoid adverse impacts from erosion.
- Clearing of vegetation for the installation or maintenance of utilities shall be kept to a minimum. Upon project completion, any disturbed areas shall be restored to their pre-project condition or better consistent with Section 4.5, Clearing, Grading, and Vegetation Conservation.

# 6. Shoreline Modification Policies and Regulations

## 6.1 Introduction

Shoreline modifications are structures or actions which permanently change the physical configuration or quality of the shoreline, particularly at the point where land and water meet. Shoreline modification activities include, but are not limited to, structures such as revetments, bulkheads, levees, breakwaters, docks, and floats. Actions such as clearing, grading, landfilling, and dredging are also considered shoreline modifications.

Generally, shoreline modification activities are undertaken for the following reasons:

- 1. To prepare a site for a shoreline use
- 2. To provide shoreline stabilization or shoreline protection
- 3. To support an upland use

The policies and regulations in this chapter are intended to prevent or mitigate the adverse environmental impacts of proposed shoreline modifications. General provisions, which apply to all shoreline modification activities, are followed by provisions tailored to specific shoreline modification activities. This chapter provides policies and regulations for shoreline modification features including shoreline stabilization measures and docks, piers, and floats.

The standards found in the tables in Section 3.6, Shoreline Uses and Shoreline Modifications for Each Designation, and Section 3.7, Shoreline Development Standards for Each Designations, are considered part of the regulations.

# 6.2 General Policies and Regulations

# 6.2.1 Applicability

The following provisions apply to all shoreline modification activities whether such proposals address a single property or multiple properties.

#### 6.2.2 Policies

- All new shoreline development should be located and designed to prevent or minimize the need for shoreline modification activities to ensure no net loss of ecological functions.
- 2. When shoreline modifications are necessary, they should be as compatible as possible with ecological shoreline processes and functions. Development should be designed in a manner that directs land alteration to the least sensitive portions of the site to maximize vegetation conservation; minimize impervious surfaces and runoff; protect riparian, nearshore and wetland habitats; protect wildlife and habitats; protect archaeological, historic and cultural resources; and preserve aesthetic values.
- 3. Development should be located, designed, and managed to minimize impacts on shoreline or upland uses through bulk and scale restrictions, setbacks, buffers, light shielding, noise attenuation, and other measures.
- 4. In the review of proposals involving modifications to the shoreline, consideration should be given to the potential cumulative impacts of similar proposals. Steps should be taken to prevent the gradual degradation of shorelines due to the cumulative impacts of seemingly small modifications.

# 6.2.3 Regulations

- All shoreline modification activities must be in support of a permitted shoreline use. Shoreline modification activities which do not support a permitted shoreline use are considered "speculative" and are prohibited by this master program; unless it can be demonstrated that such activities are necessary and in the public interest for the maintenance of shoreline environmental resource values.
- Structural shoreline modification measures shall be permitted only if nonstructural
  measures are unable to achieve the same purpose. Nonstructural measures
  considered shall include alternative site designs, increased setbacks, drainage
  improvements, relocation, and vegetation enhancement.

- 3. All new shoreline development shall be located and designed to prevent or minimize the need for shoreline modification activities.
- 4. All shoreline modification activities within the City shall comply with all other regulations as stipulated by state and federal agencies, local Tribes, or others with jurisdiction.
- 5. The City shall require and consider the following information when reviewing shoreline modification proposals:
  - a. Construction materials and methods:
  - b. Project location relative to the ordinary high water mark (OHWM);
  - c. General direction and speed of prevailing winds;
  - d. Profile rendition of beach and uplands;
  - e. Beach and upland soil type, slope and material;
  - f. Physical or geologic stability of uplands;
  - g. Potential impact to natural shoreline processes, adjacent properties, and upland stability.
- 6. Shoreline modification materials shall be only those approved by applicable state agencies. No toxic or quickly degradable materials (e.g., plastic or fiberglass that deteriorates under ultraviolet exposure) shall be used.
- 7. Shoreline modifications individually and cumulatively shall not result in a net loss of ecological functions.
- 8. Shoreline modifications that have a lesser impact on ecological functions shall be given preference over other solutions.
- 9. Shoreline modification projects shall avoid and then minimize adverse impacts to the environment to the greatest extent feasible, and where such impacts cannot be avoided, mitigation shall be provided to achieve no net loss of shoreline ecological functions. Mitigation sequencing as set forth in Section 4.4, Environmental Impacts, shall be required.

# 6.3 Shoreline Stabilization (Including Bulkheads)

# 6.3.1 Applicability

Shoreline stabilization includes actions taken to address erosion impacts to property, dwellings, businesses, or structures caused by natural processes, such as current, flood, tides, wind, or wave action. These include structural and nonstructural methods.

Nonstructural methods include building setbacks, relocation of the structure to be protected, ground water management, planning and regulatory measures to avoid the need for structural stabilization.

"Hard" structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads, while "soft" structural measures rely on less rigid materials, such as biotechnical vegetation measures or beach enhancement.

Generally, the harder the construction measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions.

As applied to shoreline stabilization measures, "normal repair" and "normal maintenance" include the patching, sealing, or refinishing of the existing structure, the replenishment of sand or other materials that has been washed away, and the replacement of less than one-third of the structure. Normal maintenance and normal repair are limited to those actions that are typically done on a periodic basis. Construction that causes significant ecological impacts is not considered normal maintenance and repair.

As applied to shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose.

Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

The Washington State Administrative Code, at WAC 173-27-040(2)(i), states that "normal protective" bulkhead common to single-family residences does not require a substantial development permit. The section adds the following qualifications:

A "normal protective" bulkhead includes those structural and nonstructural developments installed at or near, and parallel to, the ordinary high water mark for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion. A normal protective bulkhead is not exempt if constructed for the purpose of creating dry land. When a vertical or near vertical wall is being constructed or reconstructed, not more than one cubic yard of fill per one foot of wall may be used as backfill. When an existing bulkhead is being repaired by construction of a vertical wall fronting the existing wall, it shall be constructed no further waterward of the existing bulkhead than is necessary for construction of new footings. When a bulkhead has deteriorated such that an ordinary high water mark has been established by the presence and action of water landward of the bulkhead then the replacement bulkhead must be located at or near the actual ordinary high water mark. Beach nourishment and bioengineered erosion control projects may be considered a normal protective bulkhead when any structural elements are consistent with the above requirements and when the project has been approved by the department of fish and wildlife.

Note that residential bulkheads and other forms of "development" that are exempt from a permit requirement must still conform to the provisions of this master program and the Shoreline Management Act.

#### 6.3.2 Policies

 "Soft" shoreline stabilization of natural materials such as protective berms, beach enhancement or vegetation stabilization are strongly preferred over structural shoreline stabilization made of materials such as treated steel, wood, or concrete. Non-structural or "soft" measures have less adverse and cumulative impacts on

- shore features and habitats. Proposals for structural solutions including bulkheads should demonstrate that natural methods are unworkable.
- 2. Bulkheads and other structural stabilizations should be located, designed, and constructed primarily to prevent damage to existing development and ensure protection from adverse impacts to ecological functions.
- 3. New development requiring shoreline stabilization which causes significant impacts to adjacent properties and shoreline areas shall not be allowed. Shoreline uses should be located in a manner so that bulkheading and other structural stabilizations are not likely to become necessary in the future.

## 6.3.3 Regulations – General

- No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result.
- 2. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and the provisions of this master program, and then only if no net loss of ecological functions will result.
- 3. New primary structures on steep slopes or bluffs shall be set back sufficiently to ensure that shoreline stabilization will not be needed during the life of the structure, as demonstrated by a geotechnical analysis by a geotechnical engineer or related professional licensed and in good standing in the State of Washington.
- 4. Bulkhead design and development shall conform to all other applicable City and state agency policies and regulations including the Washington Department of Fish and Wildlife criteria governing the design of bulkheads.
- 5. Gabions (wire mesh filled with concrete or rocks) are prohibited.
- 6. Use of a bulkhead to protect a platted lot where no structure presently exists is prohibited.
- 7. Stairs or other permitted structures may be built into a bulkhead but shall not extend waterward of it.
- 8. Bulkheads shall be designed to permit the passage of surface or ground water without causing ponding or saturation of retained soil/materials.
- 9. Adequate toe protection consisting of proper footings, a fine retention mesh, etc., shall be provided to ensure bulkhead stability without relying on additional riprap.
- 10. Materials and dimensional standards:
  - a. New bulkheads and other shoreline stabilization structures shall not be constructed higher than 24 inches (twenty-four inches) above the OHWM or, if the bulkhead is set back from the shoreline, 24 inches above grade at the base of the bulkhead or structure. On steep slopes, new bulkheads may be built taller than 24 inches high if necessary to meet the existing slope. Replacement bulkheads may be built to the height of the original bulkhead.
  - b. The following materials are acceptable for shoreline stabilization structures:

- i. Poured-in-place concrete.
- ii. Stacked masonry units (e.g., interlocking cinder block wall units).
- iii. Large stones, with vegetation planted in the gaps. Stones should not be stacked in a wall greater than 2 horizontal to 1 vertical slope.
- iv. Timbers or logs. Note the prohibition against toxic wood treatments.
- c. The following materials are not acceptable for shoreline stabilization structures:
  - i. Degradable plastics and other non-permanent synthetic materials.
  - ii. Sheet materials, including metal, plywood, fiberglass, or plastic.
  - iii. Broken concrete or rubble.
- 11. Beach materials shall not be used for fill behind bulkheads unless it is specifically authorized by the permit and then only when it is demonstrated that leaving the material on the beach would be detrimental to shoreline resources.
- 12. Fill behind bulkheads shall be limited to an average of 1 cubic yard per running foot of bulkhead. Any filling in excess of this amount shall be considered fill and shall be subject to the provisions for fill and the requirement for obtaining a shoreline substantial development permit.
- 13. Publicly financed or subsidized shoreline erosion control measures shall not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions.

## 6.3.4 Regulations - New and Enlarged

- New stabilization measures are not allowed except to protect or support an existing or approved development, for the restoration of ecological functions, or for hazardous substance remediation pursuant to Chapter 70.105D RCW. The construction of a bulkhead for the primary purpose of retaining or creating dry land is prohibited.
- 2. New or enlarged (e.g., increase in height, width, length or depth) structural shoreline stabilization measures for a primary structure or residence and permitted shoreline use shall not be allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the structure is in danger from shoreline erosion caused by currents or waves per WAC 173-26-231(3)(a)(iii)(B). Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis by a licensed geotechnical engineer or related licensed professional, is not demonstration of need.
- 3. Hard structural shoreline stabilization measures, such as bulkheads, are not allowed unless the applicant can demonstrate through a geotechnical analysis that soft structural measures such as vegetation or beach enhancement, or nonstructural measures, such as additional building setbacks, are not feasible.
- 4. Shoreline stabilization measures along the shoreline that incorporate ecological restoration through the placement of rocks, gravel or sand, and native shoreline vegetation may be allowed. Soft shoreline stabilization that restores ecological functions may be permitted waterward of the OHWM as long as the overriding intent is not to create dry land. Where the ecological restoration includes placement of new substrates, measures shall be taken to ensure that these substrates do not erode and reduce water depth of neighboring properties.

- 5. Geotechnical reports prepared pursuant to this section must demonstrate that erosion rates projected within three years would result in damage to an existing primary structure. The report must also evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization. The project design and analysis must also evaluate vegetation enhancement and low impact development measures as a means of reducing undesirable erosion.
- 6. Where structural shoreline stabilization measures are demonstrated to be necessary, the size of stabilization measures shall be limited to the minimum necessary. The Shoreline Administrator may require that the proposed structure be altered in size or design or impacts otherwise mitigated. Impacts to sediment transport shall be avoided or minimized.
- 7. The Shoreline Administrator shall require mitigation of adverse impacts to shoreline functions in accordance with the mitigation sequence defined in Section 2, Definitions and Section 4.4, Environmental Impacts of this master program. The Shoreline Administrator may require the inclusion of vegetation conservation, as described in Section 4.5, as part of shoreline stabilization, where feasible. Any mitigation required shall be proportional to the impact of the proposed development. In order to determine acceptable mitigation, the Shoreline Administrator may require the applicant to provide necessary environmental information and analysis, including a description of existing conditions/ecological functions and anticipated shoreline impacts, along with a restoration plan outlining how proposed mitigation measures would result in no net loss of shoreline ecological functions.
- 8. Following completion of shoreline modification activities, disturbed shoreline areas shall be restored to pre-project conditions or conditions set by the Shoreline Administrator. Vegetation conservation measures, including the planting of native vegetation along the shoreline, may be required. Plantings shall consist of native grasses, shrubs, and trees as approved by the Shoreline Administrator in keeping with preexisting or typical naturally occurring bank vegetation. Vegetation shall be fully reestablished within three years. All revegetation projects shall include a program for monitoring and maintenance. Areas which fail to adequately reestablish vegetation shall be replanted with approved plants and/or vegetation until the plantings/vegetation is successfully reestablished.

# 6.3.5 Regulations - Repair and Replacement

- 1. If a repair, maintenance or replacement activity changes the location of the stabilization or alters any dimension of the stabilization by more than 10 percent, it shall be treated as a new stabilization and the City shall require mitigation in accordance with this master program.
- Existing shoreline stabilization structures may only be replaced or undergo major repairs (replacement of 50 percent or more of the length) if the applicant can demonstrate with conclusive evidence that a primary structure or use, including detached dwelling units, is in danger from shoreline erosion caused by currents or waves.
- 3. The applicant must submit the following for replacement or major repair of structural shoreline stabilization:
  - a. A written narrative that provides a demonstration of need. The written narrative shall be prepared by a qualified professional (e.g., shoreline designer or other consultant familiar

with lakeshore processes and shore stabilization), but not necessarily a licensed geotechnical engineer. The written narrative shall consist of the following:

- An assessment of the necessity for shoreline stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch, and location of the nearest structure.
- ii. An assessment of erosion potential resulting from the action of waves or other processes operating at or waterward of the OHWM in the absence of shoreline stabilization.
- iii. An assessment of the feasibility of using nonstructural or soft structural stabilization measures in lieu of hard structural shoreline stabilization measures.
- Design recommendations for minimizing impacts and ensuring that the replacement or repaired stabilization measure is designed, located, sized, and constructed to assure no net loss of ecological functions.
- Replacement walls or bulkheads shall not encroach waterward of the ordinary highwater mark or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.
  - a. Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high-water mark.

## 6.4 Docks, Piers and Floats

## 6.4.1 Applicability

Docks and piers are structures which abut the shoreline and are used as a landing or moorage place for commercial and pleasure craft.

Recreational and residential floats are also addressed in this section. These floats are anchored off shore platforms used for water-dependent recreational activities such as swimming and diving.

On Maple Valley lakes, docks, piers, and off-shore platforms are utilized for recreational and residential purposes.

## 6.4.2 Exemptions

Docks and piers for private, non-commercial pleasure craft, common to a single family residence, may be exempt from the requirement for a shoreline substantial development permit pursuant to RCW 90.58.030(3)(e)(vii). Refer to WAC 173-27-040 for complete exemption criteria.

The City will review all proposals for docks and piers to determine if:

- 1. The proposal is or is not exempt from the requirement for a substantial development permit.
- 2. The proposal is suitably located and designed and that all potential impacts have been recognized and mitigated.
- 3. The proposal is consistent with the intent, policies and regulations of the Act, and this master program.

#### 6.4.3 Policies

- 1. Docks, piers, floats, and platforms should be designed to cause minimum interference with navigable waters and the public's use of the shoreline.
- Floats, piers, and docks should be sited and designed to minimize possible adverse
  environment impacts, including potential impacts to water circulation and quality and
  fish and wildlife habitat, views and the natural visual quality of the shoreline and the
  privacy of neighboring residences.
- 3. Use of natural non-reflective materials in dock and pier construction should be encouraged.
- 4. The proposed size of the structure and intensity of use or uses of any dock or pier should be limited to that necessary for its intended use.
- 5. New docks and piers should be allowed only for water-dependent uses or public access.
- Docks and piers, including those accessory to single-family residences, should be designed and constructed to avoid individual or cumulative impacts to critical habitats.
- 7. If it is not possible to design or construct docks and piers to avoid individual or cumulative impacts to critical habitats, they should be designed and constructed to minimize and mitigate the impacts to ecological functions and environmental critical areas resources, such as near-shore fish habitats. Mitigation may include, but is not limited to, joint use of existing structures, grated decking on overwater structures, replacement of non-native vegetation, installation of in-water habitat features, or restoration of shallow water habitat. Structures should be made only of materials that have been approved by applicable state agencies.

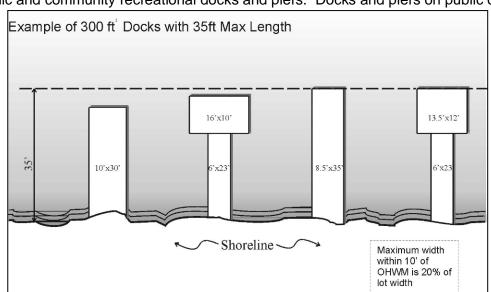
## 6.4.4 Regulations

- 1. Proposals for docks and piers shall include, at a minimum, the following information:
  - a. Description of the proposed structure, including its size, location, design and any shoreline stabilization or other modification required by the project.
  - b. Shoreline property ownership.
  - c. Proposed location of floats, buoys, piers, or docks relative to property lines and OHWM.
  - d. Materials and equipment.
- 2. Floats, piers, and docks shall not significantly interfere with use of navigable waters.
- 3. All docks and piers shall be constructed and maintained in a safe and sound condition. Abandoned or unsafe docks and piers shall be removed or repaired promptly by the owner. Where any such structure constitutes a hazard to the public, the City may, following notice to the owner, remove the structure if the owner fails to do so within ninety days. The City may impose a lien on the related shoreline property in an amount equal to the cost of the removal.

- 4. Any paint, stain or preservative applied on components of an overwater or in-water structure must be leach-resistant, completely dried or cured prior to installation. All materials that may come in contact with water shall be constructed of materials, such as untreated wood, concrete, approved plastic composites or treated steel, that will not adversely affect water quality or aquatic plants or animals. Materials shall not be treated with pentachlorophenol, creosote, chromate copper arsenate (CCA), or comparably toxic compounds as outlined in the latest edition of the Western Wood Preservers Institute Best Management Practices for the Use of Treated Wood in Aquatic and Sensitive Areas. Structures may also use other materials approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave or boat wake splash, rain or runoff.
- 5. Storage of fuel, oils, and other toxic materials is prohibited on docks and piers except portable containers when provided with secondary containment.
- 6. Pile spacing shall be the maximum feasible to minimize shading and avoid a "wall" effect that would block or baffle wave patterns, currents, littoral drift, or movement of aquatic life forms, or result in structure damage from driftwood impact or entrapment.
- 7. All lights on docks or piers shall be shielded to prevent light spillage onto neighboring properties.
- For individual single-family lots, no more than one private, non-commercial dock or pier for residential or recreational purposes is permitted for each shoreline lot or parcel.
- 9. For all new residential development of two or more waterfront dwelling units or subdivisions or other divisions of land occurring after the effective date of this SMP, only joint-use or community docks, piers, and recreational floats are allowed.
- 10. For existing lots, single-use docks, piers, or recreational floats are only allowed if the applicant can demonstrate that all other reasonable community or joint-use options have been investigated and found infeasible.
- 11. Residential dock and pier standards:

- a. Length: A dock or pier for a residence shall extend out no further than 35 feet from the OHWM and occupy no more than 300 square feet of water surface. The City may allow a longer structure if the applicant can demonstrate that a longer dock or pier is necessary to provide 2 feet of draft at low water, but in no case shall the structure be longer than 50 feet or more than 300 square feet in area. The maximum width of the dock or pier within 10 feet of the OHWM shall be 20 percent of the lot width. Existing docks or piers may be replaced, provided the footprint over water is not enlarged.
- b. Height: The walking surface elevation of a residential dock or pier shall not exceed 3 feet in height above OHWM. No permanent structure on a dock or pier over water shall extend more than 42 inches above the walking surface.
- c. Side yard Setbacks: Docks and piers shall be setback a minimum of 10 feet from side property lines.

Figure 6.4-1. Different dock and pier configurations with 300 square feet maximum area and 35 feet maximum length.



12. Public and community recreational docks and piers. Docks and piers on public or

private parks and recreational facilities shall be limited to the size necessary to meet its intended purpose. Such structures shall be located to minimize impacts to ecological functions and other water dependent visual qualities.

- 13. Floating platforms. Floating platforms shall be constructed to standards detailed in Regulations 1 through 7 above. Floats for residential lots shall be no larger than 64 square feet in surface area. The City may require that a floating platform be relocated or removed if it determines the platform causes significant ecological impacts or significant adverse impacts to navigation or visual qualities.
- 14. Boathouses are prohibited over water.
- 15. New overwater homes, including floating homes, are prohibited.

# 6.5 Shoreline Restoration and Natural Systems Enhancement

## 6.5.1 Applicability

Shoreline restoration and ecological enhancement are the improvement of the natural characteristics of upland or submerged shoreline using native materials. The materials used are dependent on the intended use of the restored or enhanced shoreline area. A Shoreline Restoration Plan was completed during the development of this SMP and recommends ecological enhancement and restoration measures.

#### 6.5.2 Policies

- 1. The City should consider shoreline enhancement as an alternative to structural shoreline stabilization and protection measures where feasible.
- 2. All shoreline enhancement projects should protect the integrity of adjacent natural resources including aquatic habitats and water quality.
- 3. Where possible, shoreline restoration should use maintenance-free or low-maintenance designs.
- 4. The City should pursue the recommendations in the shoreline restoration plan prepared as part of this SMP update. The City should give priority to projects consistent with this plan.
- 5. Shoreline restoration and enhancement should not extend waterward more than necessary to achieve the intended results.

## 6.5.3 Regulations

- Shoreline enhancement may be permitted if the project proponent demonstrates that the enhancement will not adversely affect ecological processes, properties, or habitat.
- 2. Shoreline restoration and enhancement projects shall use best available science and best management practices.
- 3. Shoreline restoration and enhancement shall not significantly interfere with the normal public use of the navigable waters of the state without appropriate mitigation.
- 4. Shoreline restoration and ecological enhancement projects may be permitted in all shoreline environments, provided:
  - a. The project's purpose is establishing, restoring, or enhancing habitat for priority species; and
  - b. It is consistent with the implementation of a comprehensive restoration plan approved by the Shoreline Administrator, or the Shoreline Administrator finds that the project provides an ecological benefit and is consistent with this SMP.
- The City may grant relief from SMP development standards and use regulations resulting from shoreline restoration projects consistent with criteria and procedures in WAC 173-27-215.

# 6.6 Dredging and Dredge Material Disposal

## 6.6.1 Applicability

For the purposes of this section, dredging shall refer to the excavation or displacement of land waterward of the ordinary high water mark.

#### 6.6.2 Policies

- 1. Dredging should be permitted for water-dependent uses of economic importance to the region and/or essential public facilities only when necessary and when alternatives are infeasible or less consistent with this SMP.
- 2. Dredging of bottom materials for the primary purpose of obtaining material for landfill, construction, or beach nourishment should not be permitted.
- 3. Spoil disposal on land outside of shoreline jurisdiction is generally preferred over disposal below the ordinary high water mark.
- 4. New development should be sited and designed to avoid or, where avoidance is not possible, to minimize the need for new maintenance dredging.
- 5. Dredging and dredge material disposal shall be done in a manner that avoids or minimizes significant ecological impacts. Impacts that cannot be avoided should be mitigated in a manner that assures no net loss of shoreline ecological functions.

## 6.6.3 Regulations

- 1. New development shall be sited and designed to avoid the need for new and maintenance dredging.
- Dredging and disposal of dredge spoils shall avoid, then minimize significant
  ecological impact. Impacts that cannot be avoided shall be mitigated to achieve no
  net loss of ecological processes and functions. Proposals for dredging and dredge
  disposal shall include details on all feasible mitigation measures to protect aquatic
  habitats.
- 3. Dredging may only be permitted as a conditional use for the following activities:
  - a. Development of new or expanded essential public facilities and only when there are no feasible alternatives or other alternatives that may have a lesser ecological impact.
  - b. Restoration or enhancement of shoreline ecological functions and processes benefiting water quality and/or fish and wildlife habitat. Dredging activity to drain wetlands shall not be allowed. Dredged material may be placed waterward of the ordinary high water mark.
  - c. Minor trenching to allow the installation or maintenance of necessary underground utilities if no alternative, including boring, is feasible, and:
    - i. Impacts to fish and wildlife habitat are avoided to the maximum extent possible.
    - ii. Appropriate best management practices are employed to prevent water quality impacts or other environmental degradation.

- 4. Dredging for the primary purpose of obtaining fill or construction material is prohibited, except when the material is necessary for the restoration of ecological functions pursuant to Subsection 2(b) above.
- 5. Limitations on dredge or disposal operation may be imposed to reduce proximity impacts, protect the public safety and assure compatibility with the interests of other shoreline users. Conditions may include limits on periods and hours of operation, type of machinery, and may require provision of landscaped buffer strips and/or fencing to address noise and visual impacts at land disposal or transfer sites.
- 6. Dredge material disposal within shoreline jurisdiction is permitted under the following conditions:
  - a. Shoreline ecological functions and processes will be preserved, restored or enhanced, including protection of surface and groundwater.
  - b. Erosion, sedimentation, floodwaters or runoff will not increase adverse impacts to shoreline ecological functions and processes or property.
- 7. Submittal requirements. The following information shall be required for all dredging applications:
  - a. A description of the purpose of the proposed dredging and an analysis of compliance with the policies and regulations of this SMP.
  - b. A detailed description of the existing physical character, shoreline geomorphology and biological resources provided by the area proposed to be dredged, including:
    - A site plan map outlining the perimeter of the proposed dredge area. The map must also include the existing bathymetry and have data points at a minimum of 2-foot depth increments.
    - ii. A habitat survey, critical areas study, fish and wildlife management plan during dredging operations, and/or mitigation plans.
    - iii. Information on stability of bedlands adjacent to proposed dredging and spoils disposal areas.
  - c. If disposal of dredge materials is proposed below the ordinary high water mark, a detailed description of the physical, chemical and biological characteristics of the dredge materials to be removed, including:
    - i. Physical analysis of material to be dredged: material composition and amount, grain size, organic materials present, source of material, etc.
    - ii. Chemical analysis of material to be dredged: volatile solids, chemical oxygen demand (COD), grease and oil content, mercury, lead and zinc content, etc.
    - iii. Biological analysis of material to be dredged.
  - d. A description of the method of materials removal, including facilities for settlement and movement.

- e. Dredging procedure: length of time it will take to complete dredging, method of dredging, and amount of materials removed.
- f. Frequency (including an estimate of the effective life expectancy of the dredging) and quantity of project maintenance dredging.
- g. Detailed plans for dredge spoil disposal, including specific land disposal sites and relevant information on the disposal site, including, but not limited to:
  - Dredge material disposal area;
  - ii. Physical characteristics including location, topography, existing drainage patterns, surface and ground water;
  - iii. Size and capacity of disposal site;
  - iv. Means of transportation to the disposal site;
  - v. Proposed dewatering and stabilization of dredged material;
  - vi. Methods of controlling erosion and sedimentation; and
  - vii. Future use of the site and conformance with land use policies and regulations.
- h. Total initial dredge volume.
- i. Plan for disposal of maintenance spoils for at least a fifty (50)-year period, if applicable.
- Hydraulic modeling studies sufficient to identify existing geo-hydraulic patterns and probable effects of dredging.

#### 6.7 Fill and Excavation

# 6.7.1 Applicability

Fill is the placement of soil, sand, rock, gravel, sediment, earth retaining structure or other material to an area waterward of the OHWM, in wetlands, or on shorelands in that manner that raises the elevation or creates dry land.

#### 6.7.2 Policies

- 1. Fills should be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes.
- 2. Fills waterward of the OHWM should be allowed only when necessary to support water-dependent use, public access, clean-up and disposal of contaminated sediments as part of an interagency environmental clean-up plan, disposal of dredged material considered suitable under, and conducted in accordance with the dredged material management program of the Washington State Department of Natural Resources (DNR), expansion or alteration of transportation facilities of statewide significance currently located on the shoreline and then only upon a demonstration that alternatives to fill are not feasible, mitigation action, environmental restoration, and beach nourishment or enhancement projects.

- 3. Fills waterward of the OHWM for any use except ecological restoration should require a conditional use permit.
- 4. Where permitted, excavation and fill coverage should be the minimum necessary to provide for the proposed use. Fill and excavation should be permitted only when tied to a specific development proposal that is permitted by this master program.
- The perimeter of fills should be designed to avoid or eliminate erosion and sedimentation impacts, both during initial fill activities and over time. Natural appearing and self-sustaining control methods are preferred over structural methods.
- 6. Replenishing sand on public and private community beaches should be allowed, subject to the assurance of no net loss of ecological functions in the process.
- 7. Sanitary landfills should not be located in shoreline jurisdiction.

## 6.7.3 Regulations

- 1. Fill, excavation, and alteration of natural drainage features and landforms shall be limited to the minimum extent necessary for development.
- 2. All shoreline development shall comply with the applicable requirements of the most recent edition of the adopted Surface Water Design Manual and all applicable City stormwater regulations. The City shall rely on source control standards and other BMPs contained in the most recent version of the Department of Ecology Stormwater Management Manual for Western Washington and the Low Impact Development Manual: Technical Guidance for Puget Sound.
- 3. Stabilization of exposed erosion-prone surfaces within the shoreline environment shall, wherever feasible, utilize soil bioengineering techniques.
- 4. Fills shall be designed, constructed, and maintained to prevent, minimize, and control all material movement, erosion, and sedimentation from the affected area.
- 5. All perimeters of fills shall be provided with vegetation, retaining walls, or other satisfactory mechanisms for erosion prevention and sediment capture.
- 6. Fill and excavation proposals must demonstrate, at a minimum, that they will result in no net loss of shoreline ecological functions.
- 7. No refuse disposal sites, solid waste disposal sites, or sanitary fills shall be permitted in shoreline jurisdiction.
- 8. Upland fills and excavation in shoreline jurisdiction that are not located within wetlands may be allowed provided they are:
  - a. Part of an allowed shoreline use or modification, necessary to provide protection to cultural resources, or part of an approved restoration plan; and
  - b. Located outside applicable buffers, unless specifically allowed in buffers.
- 9. Fill waterward of the ordinary high water mark shall be permitted as a conditional use only:
  - a. In conjunction with a water-dependent or public use permitted by this master program;

b.	In conjunction with a bridge for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist; or	
c.	For fisheries or wildlife enhancement projects.	

# 7. Administration

#### 7.1 General

The City hereby establishes an administrative system which (1) assigns responsibilities in the implementation of this master program, (2) prescribes an orderly process by which to review shoreline development and shoreline permit applications, and (3) ensures that all persons affected by this master program are treated in a fair and equitable manner.

#### 7.2 Shoreline Administrator

- 1. The Director of Community Development or his/her designee, hereinafter known as the Shoreline Administrator or Administrator, is vested with:
  - a. Overall responsibility of the administration of this master program.
  - b. Authority to approve, approve with conditions, or deny shoreline substantial development permits (SSDP) and permit revisions in accordance with the policies and provisions of this master program, unless a public hearing or appeal is involved.
  - c. Authority to grant letters of exemption from shoreline substantial development permit.
  - d. Authority to determine compliance with RCW 43.21C, State Environmental Policy Act.
- 2. The duties and responsibilities of the Administrator shall include:
  - a. Establishing the procedures and preparing forms deemed essential for the administration of this master program.
  - b. Advising interested citizens and applicants of the goals, policies, regulations, and procedures of this master program.
  - c. Making administrative decisions and interpretations of the policies and regulations of this master program and the Shoreline Management Act. Formal written interpretations require consultation with Ecology to ensure that the interpretation is consistent with the purpose and intent of the Shoreline Management Act and the applicable guidelines.
  - d. Collecting applicable fees.
  - e. Determining that all applications and necessary information and materials are provided.
  - f. Making field inspections, as necessary.
  - g. Periodically reviewing conditions on the shoreline and conducting appropriate analysis to determine whether or not other actions are necessary to protect and restore the ecology, protect human health and safety, upgrade the visual qualities, and enhance residential and recreational uses on the lake.
  - h. Keeping records of all project review actions within shoreline jurisdiction, including shoreline permits, letters of exemption, and building permits.

# 7.3 Interpretation

The Shoreline Administrator shall provide administrative interpretations in accordance with the Act, the Shoreline Master Program Guidelines, and with the Maple Valley Municipal Code.

The City shall consult with the Washington State Department of Ecology (Ecology) as needed to ensure that any formal written interpretations are consistent with the purpose and intent of chapter 90.58 RCW and 173-26 WAC.

## 7.4 Applicability to Substantial Development

The Shoreline Management Act's provisions apply to all development and uses within its jurisdiction, whether or not a shoreline permit is required. Many activities that may not require a substantial development permit, such as clearing vegetation or construction of a residential bulkhead, can cause serious damage to adjacent properties, natural resources, and lands held in public trust. Local governments have the authority and responsibility to condition a project even though it is exempt from the requirement for a substantial development permit. There has been, historically, some public confusion regarding the Shoreline Management Act's applicability. Therefore, all master programs shall include the following statement:

Unless specifically exempted by statute, all proposed uses and development occurring within shoreline jurisdiction must conform to Chapter 90.58 RCW, The Shoreline Management Act and this master program whether or not a permit is required.

# 7.5 Exceptions

Requirements to obtain a substantial development permit, conditional use permit, variance, letter of exemption, or other review to implement the Shoreline Management Act do not apply to the developments identified in WAC 173-27-044 and WAC 173-27-045.

# 7.6 Exemptions

The Shoreline Management Act requires a "shoreline substantial development permit" for all development that meets the definition of "substantial development," which is defined in RCW 90.58.030(3)(e) and in Section 2 of this master program.

The effect of this provision is to exempt all development listed in RCW 90.58.030(3)(e) and WAC 173-27-040 from the requirement to obtain a substantial development permit. However, exemption from substantial development permit requirements does not constitute exemption from the policies and use regulations of the Shoreline Management Act, the provisions of this master program, and other applicable city, state, or federal permit requirements. Further, development that is exempt from a substantial development permit may also require a shoreline variance or a conditional use permit.

Those contemplating "development" but not "substantial development," as defined in Section 2, "Definitions," and RCW 90.58.030(3)(d), shall obtain a "letter of exemption" as described below.

# 7.7 Letters of Exemption

Prior to undertaking a shoreline "development" that is exempted from a shoreline permit, the development proponent must first obtain a written "letter of exemption" from securing a

substantial development permit. This process verifies the action is exempt and offers an applicant an itemization of master program and other requirements applicable to the proposed project. The City may deny or place conditions on development exempt from a substantial development permit if it does not meet the conditions of this master program and the Shoreline Management Act.

## 7.8 Application Requirements

A complete application for a Shoreline Substantial Development, Shoreline Conditional Use, or Shoreline Variance Permit shall contain, at a minimum, the information listed in WAC 173-27-180. In addition, the applicant shall provide any materials required by relevant sections of this SMP and the following materials:

- Each applicant shall provide an assessment of the existing ecological functions and/or processes provided by topographic, physical and vegetation characteristics of the site, to accompany development proposals, provided that proposals for singlefamily residences may be exempt from this requirement.
- 2. Each site plan or division of land shall depict to scale the location of buildable areas, existing and proposed impervious surfaces, and allowed landscaping and yards. Plans shall show area calculations of each feature.
- 3. Where a view analysis is required per WAC 173-27-180 due to location of nearby residential or public properties or designated scenic highways, it shall address the following:
  - a. The analysis shall include vacant existing parcels of record as well as existing structures. Vacant parcels of record shall be assumed to be developed with structures complying with the applicable regulations of the jurisdiction and the maximum height limitation allowed under the SMP.
  - b. The view corridor analysis shall include residential buildings or public properties located outside of the shoreline jurisdiction if it can be clearly demonstrated that the subject property has significant water views.

With the exception of the information required by WAC 173-27-180, the Shoreline Administrator may vary or waive these requirements according to administrative application requirements on a case by case basis. The Shoreline Administrator may require additional specific information depending on the nature of the proposal and the presence of sensitive ecological features or issues related to compliance with other Town requirements, and the provisions of this SMP.

# 7.9 Substantial Development Permit Review Criteria

Shoreline substantial development permit applications shall be reviewed pursuant to WAC 173-27-150 and the following shoreline policies:

- 1. A permit shall be granted only when the proposed development is consistent with the Maple Valley Shoreline Master Program.
- 2. A permit shall be granted only when the proposed development is consistent with the policy of RCW 90.58.020.
- A permit shall be denied if the proposed development is not consistent with the above enumerated policies.

4. The granting of any shoreline substantial development permit by the City shall be subject to the conditions imposed by the Shorelines Hearings Board.

The following is from WAC 173-27-150 Review Criteria for Substantial Development Permits.

- 5. A substantial development permit shall be granted only when the development proposed is consistent with:
  - a. The policies and procedures of the act;
  - b. The provisions of this regulation; and
    - c. The applicable master program adopted or approved for the area. Provided, that where no master program has been approved for an area, the development shall be reviewed for consistency with the provisions of Chapter 173-26 WAC, and to the extent feasible, any draft or approved master program which can be reasonably ascertained as representing the policy of the local government.
  - 6. Local government may attach conditions to the approval of permits as necessary to assure consistency of the project with the act and the local master program.

#### 7.10 Variances and Conditional Use Permits

The Shoreline Management Act states that master programs shall contain provisions covering conditional uses and variances. These provisions should be applied in a manner which, while protecting the environment, will assure that a person will be able to use his/her property in a fair and equitable manner.

#### 7.10.1 Variances

The purposes of a variance permit is strictly limited to granting relief from specific bulk, dimensional, or performance standards set forth in the master program, and where there are extraordinary circumstances relating to the physical character or configuration of property such that strict implementation of the master program would impose unnecessary hardships on the applicant or thwart the Shoreline Management Act policies as stated in RCW 90.58.020. In all instances, extraordinary circumstances shall be shown and the public interest shall suffer no substantial detrimental effect.

- Application. An application for a shoreline variance shall be submitted on a form provided by the City accompanied by maps, completed environmental checklist, applicable fees, and any other information specified in this master program or requested by the Administrator.
- Criteria for Granting Variances. Variance permits for development and/or uses that will be located landward of the ordinary high water mark, and/or uses that will be located landward of any wetland, may be authorized provided the applicant can demonstrate all of the following:
  - The strict requirements of the bulk, dimensional, or performance standards set forth in the master program precludes, or significantly interferes with, reasonable use of the property;

- b. The hardship described above is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of the master program, and not, for example, from deed restrictions or the applicant's own actions;
- c. The design of the project will be compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and shoreline master program and will not cause adverse impacts to the shoreline environment;
- d. The variance will not constitute a grant of special privilege not enjoyed by the other properties in the area;
- e. The variance requested will be the minimum necessary to afford relief; and
- f. The public interest will suffer no substantial detrimental effect.

Variance permits for development and/or uses that will be located either waterward of the ordinary high water mark or any wetland, may be authorized provided the applicant can demonstrate all the criteria stated above as well as that public rights of navigation and use of the shorelines will not be adversely affected by granting the variance.

In the granting of all variance permits, the City shall give consideration to the cumulative impacts of additional requests for like actions in the area. For example, if variances were granted to other developments in the area where similar circumstances exist, the total of the variances shall also remain consistent with the policies of RCW 90.58 and should not produce substantial adverse effects to the shoreline environment.

Variances from the use regulations of the master program are prohibited.

#### 7.10.2 Conditional Uses

The purpose of a conditional use permit is to provide a system which allows flexibility in the application of use regulations of the master program in a manner consistent with the policies of RCW 90.58.020. In authorizing a conditional use, special conditions may be attached to the permit by the City or the Department of Ecology to prevent undesirable effects of the proposed use and/or to assure consistency of the project with the Shoreline Management Act and this master program.

- 1. Uses which are classified or set forth in this master program as conditional uses may be authorized provided that the applicant can demonstrate all of the following:
  - a. The proposed use is consistent with the policies of RCW 90.58.020 and the policies of this master program;
  - b. The proposed use will not interfere with the normal public use of public shorelines;
  - c. The proposed use of the site and design of the project is compatible with other authorized within the area under the comprehensive plan and this master program;
  - d. The proposed use cause no significant adverse effects to the shoreline environment in which it is to be located; and
  - e. The public interest suffers no substantial detrimental effect.
- 2. In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain

consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

- Other uses which are not classified or set forth in the applicable master program may be authorized as conditional uses provided the applicant can demonstrate consistency with the requirements of this section and the requirements for conditional uses contained in this master program.
- 4. Uses which are specifically prohibited by this master program may not be authorized pursuant to either subsection (1) or (2) of this section.

# 7.11 Initiation of Development

- After all local permit administrative appeals or reconsideration periods are complete
  and the permit documents are amended to incorporate any resulting changes, the
  City will mail the permit using return receipt requested mail to the Department of
  Ecology regional office and the Office of the Attorney General. Projects that require
  both Conditional Use Permits and or Variances shall be mailed simultaneously with
  any Substantial Development Permits for the project.
- 2. The permit and documentation of the final local decision will be mailed together with the complete permit application; a findings and conclusions letter; a permit data form (cover sheet); and applicable SEPA documents.
- 3. Consistent with RCW 90.58.140(6), the state's Shorelines Hearings Board twentyone day appeal period starts with the date of filing, which is defined below
  - a. For projects that only require a Substantial Development Permit: the date that Ecology receives the City decision.
  - b. For a Conditional Use Permit (CUP) or Variance: the date that Ecology's decision on the CUP or Variance is transmitted to the applicant and the City.
  - c. For SDPs simultaneously mailed with a CUP or VAR to Ecology: the date that Ecology's decision on the CUP or Variance is transmitted to the applicant and the City.

# 7.12 Appeals

Any decision made by the Administrator on a shoreline exemption or substantial development permit or by the Hearing Examiner on a conditional use or variance permit shall be final unless an appeal is made. Persons aggrieved by the grant, denial, rescission or modification of a permit may file a request for review by the Shorelines Hearings Board in accordance with the review process established by RCW 90.58.180 or as subsequently amended, and with the regulations of the Shorelines Hearings Board contained in Chapter 461-08 WAC or as subsequently amended. Pursuant to RCW 90.58.180, the request for review must be filed with the Hearings Board within twenty-one (21) days of the date of filing, as provided for in RCW 90.58.140(6).

#### 7.13 Amendments to Permits

## 7.13.1 Revision – When Required

A permit revision is required whenever the applicant proposes substantive changes to the design, terms or conditions of a project from that which is approved in the permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, this SMP, and/or the policies and provisions of chapter 90.58 RCW. Changes which are not substantive in effect do not require approval of a revision.

When an applicant seeks to revise a permit, local government shall request from the applicant detailed plans and text describing the proposed changes. Proposed changes must be within the scope and intent of the original permit, otherwise a new permit may be required, pursuant to Section 7.13.2.

## 7.13.2 Determination of Scope and Intent

- If the City determines that the proposed changes are within the scope and intent of the original permit, and are consistent with this SMP and the Act, the Town may approve a revision. "Within the scope and intent of the original permit" means all of the following:
  - a. Ground area coverage and height may be increased a maximum of ten percent (10%) from the provisions of the original permit;
  - The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of this SMP except as authorized under a Shoreline Variance granted as the original permit or a part thereof;
  - c. Additional or revised landscaping is consistent with any conditions attached to the original permit and with this SMP;
  - d. The use authorized pursuant to the original permit is not changed; and
  - e. No adverse environmental impact, including disturbance of existing vegetation or natural drainages, will be caused by the project revision.
- If the sum of the revision and any previously approved revisions are not within the scope and intent of the original permit, the City shall require that the applicant apply for a new permit.

## 7.13.3 Timing of Revision Authorization

Revisions to permits may be authorized after original permit authorization has expired under RCW 90.58.143. The purpose of such revisions shall be limited to authorization of changes which are consistent with WAC 173-27-100 and which would not require a permit for the development or change proposed under the terms of chapter 90.58 RCW and this SMP. If the proposed change constitutes substantial development then a new permit is required. Provided, this subsection shall not be used to extend the time requirements or to authorize substantial development beyond the time limits of the original permit.

# 7.13.4 Filing of Revision

1. The revision approval, including the revised site plans and text consistent with the provisions of Section 7.8 and 7.13 as necessary to clearly indicate the authorized

- changes, and the final ruling on consistency with this section shall be filed with Ecology. In addition, the Town shall notify parties of record of their action.
- 2. If the revision to the original permit involves a Shoreline Conditional Use Permit or Shoreline Variance, local government shall submit the revision to Ecology for Ecology's approval, approval with conditions, or denial, and shall indicate that the revision is being submitted under the requirements of this subsection. Ecology shall render and transmit to the City and the applicant its final decision within fifteen (15) days of the date of Ecology's receipt of the submittal from local government. The City shall notify parties of record of Ecology's final decision.

#### 7.13.5 Effective Date of Revised Permit

The revised permit is effective immediately upon final decision by local government or, when appropriate under Subsection 7.13.4 of this section, upon final action by Ecology.

## 7.13.6 Appeal of Revised Permit

- 1. Appeals of revised permit shall be in accordance with RCW 90.58.180 and shall be filed within twenty-one (21) days from the date of receipt of the Town's action by Ecology or, when appropriate under Subsection 7.12.4, the date Ecology's final decision is transmitted to the City and the applicant.
- 2. Appeals shall be based only upon contentions of noncompliance with the provisions of Subsection 7.13.1.
- 3. Construction undertaken pursuant to that portion of a revised permit not authorized under the original permit is at the applicant's own risk until the expiration of the appeals deadline.
- 4. If an appeal is successful in proving that a revision is not within the scope and intent of the original permit, the decision shall have no bearing on the original permit.

### 7.14 Unclassified Uses

Other uses that are not classified in this master program may be authorized as conditional uses provided the applicant can demonstrate, in addition to the criteria set forth above, that extraordinary circumstances preclude reasonable use of the property in a manner consistent with the use regulations of the City of Maple Valley Shoreline Master Program.

After the City's approval of a conditional use or variance permit, the Administrator shall submit the permit to the Department of Ecology for its approval, approval with conditions, or denial. Upon receipt of the Department of Ecology decision, the Administrator shall notify those interested persons having requested notification of such decision.

# 7.15 Nonconforming Lots, Structures, and Uses

Nonconforming lots, structures, and uses are those that were lawfully constructed or established prior to the effective date of the Act or this master program, or amendments thereto, but which does not conform to present regulations or standards of this master program or policies of the Act. In such cases, the following standards shall apply.

Residential structures, including appurtenant structures, established prior to the effective date of this master program are classified as conforming, even if they do not meet the master program

standards for setbacks, buffers, or yards; area; bulk; height; or density. Re-development, expansion, and replacement of such structures is allowed, so long as it is consistent with the provisions of this SMP and results in no net loss of shoreline ecological functions. This classification does not apply to bulkheads, other shoreline modifications, and over-water structures.

## 7.15.1 Nonconforming Uses

- 1. Uses that were legally established and are nonconforming with regard to the use regulations of the master program may continue as legal nonconforming uses.
- 2. Nonconforming uses may be changed to other uses that are allowed by this code. Alternatively, an applicant may apply for a conditional use permit to change a nonconforming use to another, less nonconforming use if a showing can be made that the new use will have fewer detrimental effects on the shoreline environment, the surrounding neighborhood, and properties than the existing use.
- 3. If a nonconforming use is abandoned or discontinued for a period of 12 consecutive months, or for 12 months within any two-year period, the nonconforming rights shall expire and any future use shall be conforming unless re-establishment of the use is authorized through a conditional use permit which must be applied for within the two-year period. Water-dependent uses should not be considered discontinued when they are inactive due to dormancy, or where the use includes phased or rotational operations as part of typical operations.
- 4. In the absence of other more specific regulations in the master program, such uses shall not be enlarged or expanded, except upon approval of a conditional use permit.

## 7.15.2 Nonconforming Structures

- Structures that were legally established and are used for a conforming use but are nonconforming with regard to setbacks, buffers or yards; area; bulk; height or density may continue as legal nonconforming structures and may be maintained and repaired.
- 2. Nonconforming structures may be enlarged or expanded provided that said enlargement meets the applicable provisions of the master program. In the absence of other more specific regulations, proposed expansion shall not increase the extent of nonconformity by further encroaching upon or extending into areas where construction would not be allowed for new structures, unless a shoreline variance permit is obtained.
- 3. Nonconforming single-family residences that are located landward of the ordinary high water mark may be enlarged or expanded in conformance with applicable bulk and dimensional standards by the addition of space to the main structure or by the addition of normal appurtenances as defined in WAC 173-27-040 (2)(g) upon approval of a conditional use permit.
- 4. A structure for which a variance has been issued shall be considered a legal nonconforming structure and the requirements of this section shall apply as they apply to preexisting nonconformities.

- 5. In the absence of other more specific regulations, a structure which is being or has been used for a nonconforming use may be used for a different nonconforming use only upon the approval of a conditional use permit. A conditional use permit may be approved only upon a finding that:
  - a. No reasonable alternative conforming use is practical; and
  - b. The proposed use will be at least as consistent with the policies and provisions of the act and the master program and as compatible with the uses in the area as the preexisting use

In addition, such conditions may be attached to the permit as are deemed necessary to assure compliance with the above findings, the requirements of the master program and the Shoreline Management Act and to assure that the use will not become a nuisance or a hazard.

- 6. A nonconforming structure which is moved any distance must be brought as closely as practicable into conformance with the applicable master program and the act.
- 7. If a nonconforming development is damaged, it may be reconstructed to those configurations existing immediately prior to the time the development was damaged, provided that application is made for the permits necessary to restore the development within one year of the date the damage occurred.

## 7.15.3 Nonconforming Lot

1. A nonconforming lot may be developed if permitted by other land use regulations of Maple Valley and so long as such development conforms to all other requirements of the applicable master program and the act.

# 7.16 Moratoria Authority and Requirements

- 1. The City has authority to adopt a moratorium control or other interim control on development under RCW 90.58.590.
- 2. Before adopting the moratorium must;
  - a. Hold a public hearing on the moratorium or control;
  - b. Adopt detailed findings of fact that include, but are not limited to, justifications for the proposed or adopted actions and explanations of the desired and likely outcomes;
  - c. Notify the department of Ecology of the moratorium or control immediately after its adopting. The notification must specify the time, place, and date of any public hearing.
  - d. The public hearing must be held within sixty days of adopting of the moratorium or control.
- A moratorium or control adopted under this section may be effective for up to six months if a detailed work plan for remedying the issues and circumstances necessitating the moratorium or control is developed and made available for public review.



# 6. Appendices

A. Shoreline Critical Areas Regulations

ppendix A: Shoreline Critical Areas Regulations	

# Appendix A SHORELINE CRITICAL AREAS REGULATIONS

#### Sections:

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### 18.60.010 Purpose.

The purpose of this appendix is to designate, classify, and protect the critical areas within the shoreline jurisdiction of Maple Valley by establishing regulations and standards for development and use of

properties which contain or adjoin shoreline jurisdictional critical areas for protection of the public health, safety, and welfare. The purpose and intent of this appendix is also to ensure that there is no net loss of the acreage or functions and values of shoreline jurisdictional critical areas regulated by this appendix. The regulations in this appendix are fully enforceable and considered part of the SMP.

- A. Establishing development standards to protect defined shoreline jurisdictional critical areas;
- B. Protecting members of the public and public resources and facilities from injury, loss of life, property damage or financial loss due to flooding, erosion, landslides, seismic events, soil subsidence or steep slope failures;
- C. Protecting unique, fragile and valuable elements of the environment including, but not limited to, wildlife and its habitat:
- D. Requiring mitigation of unavoidable impacts on environmentally critical areas by regulating alterations in or near shoreline jurisdictional critical areas;
- E. Preventing cumulative adverse environmental impacts on water availability, water quality, ground water, wetlands and streams;
- F. Measuring the quantity and quality of wetland and stream resources and preventing overall net loss of wetland and stream functions;
- G. Protecting the public trust as to navigable waters and aquatic resources;
- H. Alerting members of the public including, but not limited to, appraisers, owners, potential buyers or lessees to the development limitations of shoreline jurisdictional critical areas; and
- I. Providing City officials with sufficient information to protect shoreline jurisdictional critical areas.

#### 18.60.020 Applicability.

A. The provisions of this chapter shall apply to all lands, land uses, and development activity in areas of shoreline jurisdiction in the City of Maple Valley. No action shall be taken by any person, which results in any alteration of any shoreline jurisdictional critical areas except as consistent with the purposes, objectives, and goals of this SMP.

#### 18.60.030 Definitions.

A. "Critical areas" include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas. "Fish and wildlife habitat conservation

areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company.

- B. "Critical aquifer recharge areas (CARA)" means those areas with a critical recharging effect on aquifers used for potable water as defined by WAC <u>365-190-030(3)</u>. CARA include:
  - 1. Those areas that have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water.
  - 2. Wellhead protection areas defined by the boundaries of the 10-year time of ground water travel, or boundaries established using alternate criteria approved by the Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.
  - 3. Those critical aquifer recharge areas delineated by a hydrogeologic study prepared in accordance with the State Department of Ecology guidelines.
  - 4. Susceptible ground water management areas as designated pursuant to Chapter 173-100 WAC.
  - 5. Special protection areas as defined by WAC 173-200-090.
  - 6. Those aquifer recharge areas meeting the criteria for susceptibility or vulnerability established by the State Department of Ecology.
  - 7. Sole source aquifers as designated by the U.S. Environmental Protection Agency under the Sole Source Aquifer Protection Plan authorized by Section 1424(e) of the Safe Drinking Water Act of 1974.
- C. "Director" means the Director of the Community Development Department or designee.
- D. "Erosion" means the process by which soil particles are mobilized and transported by natural agents such as wind, rainsplash, frost action or surface water flow.
- E. "Erosion hazard areas" means those areas underlain by soils which are subject to severe erosion when disturbed. Such soils include, but are not limited to, those classified as having a severe to very severe erosion hazard according to the USDA Natural Resources Conservation Service. These soils include, but are not limited to, any occurrence of River Wash ("Rh") or Coastal Beaches ("Cb") and the

following when they occur on slopes 15 percent or steeper: Alderwood Gravelly Sandy Loam (AgD), Alderwood and Kitsap (AkF), Beausite Gravelly Sandy Loam (BeD and BeF), Ovall Gravelly Loam (OvD and OvF), Ragnar Fine Sandy Loam (RaD), and Ragnar-Indianola association (RdE).

- F. "Flood hazard areas" means those areas subject to a general and temporary condition of partial or complete inundation of normally dry land areas from:
  - 1. The overflow of inland waters; and/or
  - 2. The unusual and rapid accumulation of runoff of surface waters from any source.
- G. "Hazardous substance processing or handling" means the use, storage, manufacture, or other land use activity involving hazardous substances, but does not include individually packaged consumer products or quantities of hazardous substances less than five gallons in volume per container. Hazardous substances shall not be disposed on site unless in compliance with Dangerous Waste Regulations, Chapter 173-303 WAC, and any pertinent local ordinances, such as sewer discharge standards.
- H. "Hazardous waste" means and includes all dangerous waste and extremely hazardous waste as designated pursuant to Chapter 70.105 RCW and Chapter 173-303 WAC.
  - 1. "Dangerous waste" means any discarded, useless, unwanted or abandoned substances including, but not limited to, certain pesticides, or any residues or containers of such substances which are disposed of in such quantity or concentration as to pose a substantial present or potential hazard to human health, wildlife, or the environment because such wastes or combinations of such wastes:
    - a. Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or
    - b. Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.
  - 2. "Extremely hazardous waste" means any waste which:
    - a. Will persist in a hazardous form for several years or more at a disposal site and which in its persistent form presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic makeup of humans or wildlife; and

- b. Is disposed of at a disposal site in such quantities as would present an extreme hazard to humans or the environment.
- I. "Landslide" means episodic downslope movement of a mass including, but not limited to, vegetation, soil and rock.
- J. "Landslide hazard area" means those areas subject to landslides based on a combination of geologic, topographic, and hydrologic factors, and include, at a minimum, the following:
  - 1. Areas of historic failures, such as:
    - a. Those areas delineated by the United States Department of Agriculture Natural Resources
       Conservation Service as having a significant limitation for building site development;
    - b. Those coastal areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the department of ecology Washington coastal atlas; or
    - c. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Washington department of natural resources.
  - 2. Areas with all three of the following characteristics:
    - a. Slopes steeper than 15 percent;
    - b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrockl; and
    - c. Springs or ground water seepage;
  - 3. Any area which has shown movement during the Holocene epoch, from 10,000 years ago to the present, or which is underlain or covered by mass wastage debris of this epoch;
  - 4. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
  - 5. Slopes having gradients steeper than eighty percent subject to rockfall during seismic shaking;
  - 6. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action, including stream channel migration zones; or

- 7. Any area located in a canyon or on an alluvial fan, presently subject to or potentially subject to inundation by debris flows or catastrophic flooding; and
- 8. Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.
- K. "Qualified professional," for purposes of this chapter, means a person with experience and training in the applicable critical area. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or related field, and two years of related work experience.
  - 1. A qualified professional for watercourses, wetlands, and wildlife habitat conservation areas must have a degree in biology or related field and relevant professional experience.
  - 2. A qualified professional for preparing geotechnical reports and geotechnical design recommendations must be a professional geotechnical engineer, licensed in the State of Washington, as defined under WAC <u>16-210-010(5)</u>. Identification and evaluation of geologic hazards may be performed by geologists or other geology professionals with experience identifying geologic hazards.
- L. "Seismic hazard areas" means those areas subject to severe risk of earthquake damage as a result of soil liquefaction in areas underlain by cohesionless soils of low density and usually in association with a shallow ground water table or of other seismically induced settlement.
- M. "Steep slope hazard areas" means those areas on slopes 40 percent or steeper within a vertical elevation change of at least 10 feet. A slope is delineated by establishing its toe and top and is measured by averaging the inclination over at least 10 feet of vertical relief. For the purpose of this definition:
  - 1. The toe of a slope is a distinct topographic break in slope which separates slopes inclined at less than 40 percent from slopes 40 percent or steeper. Where no distinct break exists, the toe of a steep slope is the lowermost limit of the area where the ground surface drops 10 feet or more vertically within a horizontal distance of 25 feet; and
  - 2. The top of a slope is a distinct, topographic break in slope which separates slopes inclined at less than 40 percent from slopes 40 percent or steeper. Where no distinct break exists, the top of a steep slope is the uppermost limit of the area where the ground surface drops 10 feet or more vertically within a horizontal distance of 25 feet.

N. "Stream functions" means natural processes performed by streams including functions which are important in facilitating food chain production, providing habitat for nesting, rearing and resting sites for aquatic, terrestrial and avian species, maintaining the availability and quality of water, such as purifying water, acting as recharge and discharge areas for ground water aquifers, moderating surface and stormwater flows and maintaining the free flowing conveyance of water, sediments and other organic matter.

O. "Streams" means those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless they are used by salmonids or are used to convey streams naturally occurring prior to construction in such watercourses.

For the purpose of this definition, a "defined channel or bed" is an area which demonstrates clear evidence of the passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds and defined-channel swales.

The channel or bed need not contain water year-round.

For the purpose of defining the following categories of streams, "normal rainfall" is rainfall that is at or near the mean of the accumulated annual rainfall record, based upon the water year as recorded at the Seattle-Tacoma International Airport:

- 1. "Streams with fish" are those used by salmonids;
- 2. "Streams without fish" are those streams not used by salmonids that flow year-round during years of normal rainfall; and
- 3. "Intermittent streams" are those streams that are intermittent or ephemeral during years of normal rainfall and that are not used by salmonids.
- P. "Wetland edge" means the line delineating the outer edge of a wetland, consistent with the approved federal wetland delineation manual and applicable regional supplements.
- Q. "Wetland functions" means natural processes performed by wetlands including functions which are important in facilitating food chain production, providing habitat for nesting, rearing and resting sites for aquatic, terrestrial and avian species, maintaining the availability and quality of water, acting as recharge and discharge areas for ground water aquifers and moderating surface and stormwater flows, as well as performing other functions including, but not limited to, those set forth in 33 CFR 320.4(b)(2), 1988.

- R. "Wetland, isolated" means a wetland which has a total size less than 5,000 square feet excluding buffers, which is hydrologically isolated from other wetlands or streams, does not have permanent open water, and is determined to be of low function.
- S. "Wetlands" means those areas which are inundated or saturated by ground or surface water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands generally include swamps, marshes, bogs and similar areas, or other artificial features intentionally created to mitigate conversions of wetlands pursuant to wetlands mitigation banking.

Wetlands do not include artificial features created from nonwetland areas including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street or highway.

- T. "Wildlife habitat conservation areas" means those areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density of species richness. "Wildlife habitat conservation areas" do not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company. All areas within the City of Maple Valley meeting one or more of the following criteria are designated wildlife habitat conservation areas:
  - 1. Areas with which nonaquatic State- or federally designated endangered, threatened, and sensitive species have a primary association.
    - a. Federally designated endangered and threatened species are those wildlife species identified by the U.S. Fish and Wildlife Service that are in danger of extinction or are threatened to become endangered.
    - b. State-designated endangered, threatened, and sensitive nonaquatic wildlife species are those wildlife species native to the State of Washington identified by the Washington State Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a

significant portion of their range within the State without cooperative management or removal of threats. State-designated endangered, threatened, and sensitive species are periodically recorded in WAC <u>232-12-014</u> (State endangered species), and WAC <u>232-12-011</u> (State threatened and sensitive species).

2. Habitats and species of local importance. Habitats and species of local importance are those identified by the City Council, including those that possess unusual or unique habitat warranting protection, or land areas found by the City Council to be essential for preserving connections between habitat blocks and open spaces.

#### 18.60.100 Disclosure by applicant.

A. The applicant shall disclose to the City the presence of critical areas on the development proposal site and any mapped or identifiable critical areas within 100 feet of the applicant's property to the extent known by, or readily available to, the applicant.

B. If the development proposal site contains or is within a critical area, the applicant shall submit a statement which declares whether the applicant has knowledge of any illegal alteration to any or all critical areas on the development proposal site and whether the applicant previously has been found in violation of this chapter. If the applicant previously has been found in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the City.

#### 18.60.110 Critical area review.

A. The City shall perform a critical area review for any development proposal permit application or other request for permission to proceed with an alteration on a site which includes a critical area or is within an identified critical area buffer or building setback area.

- B. As part of the critical area review, the City shall:
  - 1. Determine whether any critical area exists on the property and confirm its nature and type;
  - 2. Determine whether a critical area special study is required;
  - 3. Evaluate the critical area special study;
  - 4. Determine whether the development proposal is consistent with this chapter;
  - 5. Determine whether any proposed alteration to the critical area is necessary; and

6. Determine if the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety and welfare, consistent with the goals, purposes, objectives and requirements of this chapter.

#### 18.60.120 Critical area special study requirement.

A. When review is required, an applicant for a new development proposal which includes a critical area or is within an identified critical area buffer shall submit a critical area special study to adequately evaluate the proposal and all probable impacts.

- B. The City may waive the requirement for a special study if the applicant shows, to the City's satisfaction, that any of the following are met:
  - 1. There will be no alteration of the critical area or buffer:
  - 2. The development proposal will not have an impact on the critical area in a manner contrary to the goals, purposes, objectives and requirements of this chapter; and
  - 3. The minimum standards required by this chapter are met.
- C. If necessary to ensure compliance with this chapter, the City may require additional information from the applicant, separate from the special study.

## 18.60.130 Contents of critical area special study.

- A. The critical area special study shall be in the form of a written report that has been prepared by a qualified professional and shall contain the following, as applicable:
  - 1. Identification and characterization of all critical areas on or encompassing the development proposal site;
  - 2. Assessment of the impacts or risks of any alteration proposed for a critical area or buffer, assessment of the impacts of any alteration on the development proposal, other properties and the environment, and/or assessment of the impacts to the development proposal resulting from development in the critical area or buffer;
  - 3. Studies which propose adequate mitigation, maintenance, monitoring and contingency plans and bonding measures;
  - 4. A scale map of the development proposal site;

- 5. Detailed studies on habitat value, hydrology, geological hazard, erosion and sedimentation and/or water quality. Such detailed studies shall include specific recommendations for mitigation which may be required as a condition of any development proposal approval. The recommendations may include, but are not limited to, construction techniques or design, drainage or density specifications; and
- 6. Other detailed studies, as required by the Director.
- B. A critical area special study may be combined with any studies required by other laws and regulations; and
- C. If the development proposal will affect only a part of the development proposal site, the City may limit the scope of the required special study to include only that part of the site which may be affected by the development.

# 18.60.140 Mitigation, maintenance, monitoring and contingency.

A. As determined by the City, mitigation, maintenance and monitoring measures shall be in place to protect critical areas and buffers from alterations occurring on the development proposal site.

B. Where monitoring reveals a significant deviation from predicted impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible for appropriate corrective action which, when approved, shall be subject to further monitoring.

# 18.60.150 Financial guarantees.

Financial guarantees may be required by the Director in the form of bonds, letters of credit, assignment of savings accounts, or similar performance or maintenance security devices.

# 18.60.160 Vegetation management plan.

A. For all development proposals where preservation or enhancement of existing vegetation is required by this chapter or by conditions of approval for a Process 2, 3, or 4 application, a vegetation management plan shall be submitted and approved prior to issuance of the permit or other request for permission to proceed with an alteration.

- B. The vegetation management plan shall identify the proposed clearing limits for the project and any areas where vegetation in a critical area or its buffer is proposed to be disturbed.
- C. Where clearing includes cutting any merchantable stand of timber, as defined in WAC <u>222-16-010(28)</u>, the vegetation management plan shall include a description of proposed logging practices which demonstrates how all critical areas will be protected in accordance with the provisions of this chapter.

- D. Clearing limits as shown on the plan shall be marked in the field in a prominent and durable manner. Proposed methods of field marking shall be reviewed and approved by City prior to any site alteration. Field marking shall remain in place until the Certificate of Occupancy or final project approval is granted.
- E. The vegetation management plan may be incorporated into a temporary erosion and sediment control plan or landscaping plan where either of these plans is required by other laws or regulations.
- F. Submittal requirements for vegetation management plans shall be set forth in administrative rules.

# 18.60.170 Critical area tract markers and signs.

- A. Permanent survey stakes delineating the boundary between adjoining property and critical area tracts shall be set, using iron or concrete markers as established by current survey standards.
- B. The boundary between a critical area tract and contiguous land shall be identified with permanent signs at intervals as required by the Director.

#### 18.60.180 Notice on title.

A. The owner of any property containing critical areas or buffers on which a development proposal is approved, except a public right-of-way or the site of a permanent public facility, shall file a notice approved by the City with the King County Records and Elections Division. The required contents and form of the notice shall be set forth in administrative rules. The notice shall inform the public of the presence of critical areas or buffers on the property, of the application of this chapter to the property and that limitations on actions in or affecting such critical areas or buffers may exist. The notice shall run with the land.

B. The applicant shall submit proof that the notice has been filed for public record before the City shall issue permits for any development proposal for the property or, in the case of subdivisions, short subdivisions and binding site plans, at or before recording the final plat or final binding site plan.

### 18.60.190 Critical area tracts and designations on site plans.

A. Critical area tracts shall be used to delineate and protect those critical areas and buffers listed below in development proposals for subdivisions, short subdivisions or binding site plans and shall be recorded on all documents of title of record for all affected lots:

- 1. All landslide hazard areas and buffers which are one acre or greater in size;
- 2. All steep slope hazard areas and buffers which are one acre or greater in size;
- 3. All wetlands and buffers; and

#### 4. All streams and buffers.

B. Any required critical area tract shall be held in an undivided interest by each owner of a building lot within the development with this ownership interest passing with the ownership of the lot or shall be held by an incorporated homeowner's association or other legal entity which assures the ownership, maintenance and protection of the tract.

C. Site plans submitted as part of development proposals for Building Permits, master plan developments and Clearing and Grading Permits shall include and delineate all landslide and steep slope hazard areas, streams and wetlands, buffers and building setbacks.

#### 18.60.200 Alteration.

Any human activity which results or is likely to result in an impact upon the existing condition of a critical area is an alteration which is subject to specific limitations as specified for each critical area. Alterations include, but are not limited to, grading, filling, dredging, draining, channelizing, applying herbicides or pesticides or any hazardous substance, discharging pollutants except stormwater, grazing domestic animals, paving, constructing, applying gravel, modifying for surface water management purposes, cutting, pruning, topping, trimming, relocating or removing vegetation or any other human activity which results or is likely to result in an impact to existent vegetation, hydrology, wildlife or wildlife habitat.

Alterations do not include walking, fishing or any other passive recreation or other similar activities.

# 18.60.210 Building setbacks.

Unless otherwise provided, buildings and other structures shall be set back a distance of 15 feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. The following may be allowed in the building setback area:

- A. Landscaping;
- B. Uncovered decks;
- C. Building overhangs if such overhangs do not extend more than 18 inches into the setback area; and
- D. Impervious ground surfaces, such as driveways and patios; provided, that such improvements may be subject to special drainage provisions.

#### 18.60.220 Erosion hazard areas.

A. Clearing on an erosion hazard area is allowed only from April 1st to September 1st, except that:

- 1. Up to 15,000 square feet may be cleared on any lot, subject to any other requirement for vegetation retention and subject to any Clearing and Grading Permit required by the MVMC; and
- 2. Timber harvest may be allowed pursuant to an approved Forest Practice Permit issued by the Washington State Department of Natural Resources.
- B. All development proposals on sites containing erosion hazard areas shall include a temporary erosion control plan consistent with this section and other laws and regulations prior to receiving approval. Specific requirements for such plans shall be set forth by the Director.
- C. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:
  - 1. Except as provided in this section, existing vegetation shall be retained on all lots until Building Permits are approved for development on individual lots;
  - 2. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to submit a restoration plan to the City for review and approval. Following approval, the applicant shall be required to implement the plan;
  - 3. Clearing of vegetation on lots may be allowed without a separate Clearing and Grading Permit if the City determines that:
    - a. Such clearing is a necessary part of a large-scale grading plan;
    - b. It is not feasible to perform such grading on an individual lot basis; and
    - c. Drainage from the graded area will meet water quality standards to be established by administrative rules.
- D. Where the City determines that erosion from a development site poses a significant risk of damage to downstream receiving waters, based either on the size of the project, the proximity to the receiving water or the sensitivity of the receiving water, the applicant shall be required to provide regular monitoring of surface water discharge from the site. If the project does not meet water quality standards established by law or administrative rules, the City may suspend further development work on the site until such standards are met.
- E. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas shall be prohibited unless specifically approved on a case-by-case basis by the City.

- F. No new development or creation of new lots is allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development (WAC 173-26-221(2)(c)(ii)(B)).
- G. No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. (WAC 173-26-221(2)(c)(ii)(C)).
- H. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

#### 18.60.230 Landslide hazard areas.

A development proposal on a site containing a landslide hazard area shall meet the following requirements:

- A. A minimum buffer of 50 feet shall be established from all edges of the landslide hazard area. The buffer shall be extended as required to mitigate a steep slope or erosion hazard or as otherwise necessary to protect the public health, safety and welfare;
- B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a landslide hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection;
- C. Vegetation on slopes within a landslide hazard area or buffer which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to the City pursuant to an enhancement plan approved by the City. The use of hazardous substances, pesticides and fertilizers in landslide hazard areas and their buffers may be prohibited by the City; and
- D. Alterations to landslide hazard areas and buffers may be allowed only as follows:
  - 1. A landslide hazard area located on a slope 40 percent or steeper may be altered only if the alteration meets the standards and limitations set forth for steep slope hazard areas in SMP Appendix A 18.60.250;

- 2. A landslide hazard area located on a slope less than 40 percent may be altered only if the alteration meets the following requirements:
  - a. The development proposal will not decrease slope stability on contiguous properties; and
  - b. Mitigation based on the best available engineering and geological practices is implemented which either eliminates or minimizes the risk of damage, death or injury resulting from landslides: and
- 3. Neither buffers nor a critical area tract shall be required if the alteration meets the standards of subsection (D) of this section.
- E. No new development or creation of new lots is allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development (WAC 173-26-221(2)(c)(ii)(B)).
- F. No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. (WAC 173-26-221(2)(c)(ii)(C)).
- G. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

## 18.60.240 Seismic hazard areas.

A development proposal on a site containing a seismic hazard area shall meet the following requirements:

A. Unless exempt, development proposals shall be subject to review standards based on two occupancy types: critical facilities and other structures. The review standards for critical facilities shall be based on longer earthquake reoccurrence intervals. The review standards for both occupancy types shall be set forth in administrative rules;

- B. Alterations to seismic hazard areas may be allowed only as follows:
  - 1. The evaluation of site-specific subsurface conditions shows that the proposed development site is not located in a seismic hazard area; or

- 2. Mitigation based on the best available engineering and geological practices is implemented which either eliminates or minimizes the risk of damage, death or injury resulting from seismically induced settlement or soil liquefaction; and
- 3. Mobile homes may be placed in seismic hazard areas without performing special studies to address the seismic hazard. Such mobile homes may be subject to special support and tie-down requirements. These requirements shall be set forth in administrative rules;
- C. Buildings with less than 2,500 square feet of floor area or roof area (whichever is greater) that contain no living quarters and that are not used as places of employment or public assembly are exempt from the provisions of this section.
- D. No new development or creation of new lots is allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development (WAC 173-26-221(2)(c)(ii)(B)).
- E. No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. (WAC 173-26-221(2)(c)(ii)(C)).
- F. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

# 18.60.250 Steep slope hazard areas.

A development proposal on a site containing a steep slope hazard area shall meet the following requirements:

A. A minimum buffer of 50 feet shall be established from the top, toe and along all sides of any slope 40 percent or steeper. The buffer shall be extended as required to mitigate a landslide or erosion hazard or as otherwise necessary to protect the public health, safety and welfare. The buffer may be reduced to a minimum of 10 feet if, based on a special study, the City determines that the reduction will adequately protect the proposed development and the critical area. For single-family residential Building Permits only, the City may waive the special study requirement if other development in the area has already provided sufficient information or if such information is otherwise readily available. The City may authorize buffer reductions to no less than 10 feet if the City determines that the reduction will adequately protect

the proposed development and the critical area pursuant to the requirements for a special study under SMP Appendix A 18.60.130.

- B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a steep slope hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection.
- C. Vegetation on steep slopes within steep slope hazard areas or their buffers which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to the City pursuant to a vegetation management plan approved by the City. The use of hazardous substances, pesticides and fertilizers in steep slope hazard areas and their buffers may be prohibited by the City.
- D. Alterations to steep slope hazard areas and buffers may be allowed only as follows:
  - 1. Approved surface water conveyances, as specified in the King County Surface Water Design Manual or other reference source or manual in use by the City, may be allowed on steep slopes if they are installed in a manner to minimize disturbance to the slope and vegetation;
  - 2. Public and private trails may be allowed on steep slopes as approved by the City. Under no circumstances shall trails be constructed of concrete, asphalt or other impervious surfaces which will contribute to surface water runoff, unless such construction is necessary for soil stabilization or soil erosion prevention or unless the trail system is specifically designed and intended to be accessible to handicapped persons. Additional requirements for trail construction may be set forth in administrative rules:
  - 3. Utility corridors may be allowed on steep slopes if a special study shows that such alteration will not subject the area to the risk of landslide or erosion;
  - 4. Limited trimming and pruning of vegetation may be allowed on steep slopes pursuant to an approved vegetation management plan for the creation and maintenance of views if the soils are not disturbed and the activity is subject to administrative rules;
  - 5. Approved mining and quarrying activities may be allowed;
  - 6. Stabilization of sites where erosion or landsliding threaten public or private structures, utilities, roads, driveways or trails, or where erosion and landsliding threatens any lake, stream, wetland or

shoreline. Stabilization work shall be performed in a manner which causes the least possible disturbance to the slope and its vegetative cover;

- 7. Reconstruction, remodeling, or replacement of existing structures;
- 8. Reconstruction, remodeling, or replacement of an existing structure upon another portion of an existing impervious surface which was established pursuant to City laws and regulations may be allowed, provided:
  - a. If within the buffer, the structure is located no closer to the steep slope than the existing structure:
  - b. The existing impervious surface within the buffer or steep slope is not expanded as a result of the reconstruction or replacement.
- E. The following are exempt from the provisions of this section:
  - 1. Slopes which are 40 percent or steeper with a vertical elevation change of up to 20 feet if no adverse impact will result from the exemption based on the City's review of and concurrence with a soils report prepared by a geologist or geotechnical engineer; and
  - 2. The approved regrading of any slope which was created through previous legal grading activities. Any slope which remains 40 percent or steeper following site development shall be subject to all requirements for steep slopes.
- F. No new development or creation of new lots is allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development (WAC 173-26-221(2)(c)(ii)(B)).
- G. No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. (WAC 173-26-221(2)(c)(ii)(C)).
- H. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

#### 18.60.255 Critical aquifer recharge areas.

Development on or adjacent to a critical aquifer recharge area shall meet the following requirements:

A. For projects where the construction of structures and improvements, including additions, results in more than 50 percent total site impervious surface area, the applicant shall provide surface water infiltration according to a surface water management plan that mitigates impacts to the aquifer recharge process, or shall submit a hydrogeologic assessment that indicates the proposal will not impact the recharge effect of the aquifer. Surface water management plans and hydrogeologic assessments shall be subject to review and approval by the Director.

- B. For development that includes hazardous substance processing or handling, or significant diversion, alteration or reduction to the flow of surface or ground waters, or otherwise significantly reduces the recharging of the aquifer, the development must be designed and constructed in accordance with a critical areas study that includes a hydrogeologic assessment of ground water vulnerability, including an assessment of predicted impacts to ground water recharge and ground water quality. Applications for development that will significantly affect ground water recharge or quality shall be denied if such impacts cannot be adequately mitigated.
- C. The proposed activity must comply with the water source protection requirements and recommendations of the Federal Environmental Protection Agency, State Department of Health, and Seattle-King County Public Health.
- D. Storage Tanks. The Fire Marshal specifically regulates and authorizes permits for underground storage tanks, and the Washington State Department of Ecology also regulates and authorizes permits for underground storage tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:
  - 1. Underground Tanks. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
    - a. Prevent releases due to corrosion or structural failure for the operational life of the tank;
    - b. Be protected against corrosion, constructed of noncorrosive material, steel-clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and
    - c. Use material in the construction or lining of the tank that is compatible with the substance to be stored.

- 2. Aboveground Tanks. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
  - a. Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;
  - b. Have a primary containment area enclosing or underlying the tank or part thereof; and
  - c. For all tanks, a secondary containment system either built into the tank structure or a dike system built outside the tank.

# E. Vehicle Repair and Servicing.

- 1. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
- 2. No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the State Department of Ecology prior to commencement of the proposed activity.
- F. Uses Prohibited from Critical Aquifer Recharge Areas. The following activities and uses are prohibited in critical aquifer recharge areas, provided expansion of existing uses may be allowed by the City if the applicant demonstrates through a special study that the proposed expansion will not negatively impact ground water quality or recharge:
  - 1. Waste transfer stations, landfills, and disposal of hazardous or dangerous waste, municipal solid waste, special waste, woodwaste, and inert and demolition waste;
  - 2. Junk yards;
  - 3. Inoperative Vehicles. Storage of wrecked or inoperative vehicles, except as an accessory to an allowed use when stored over impervious paving with drainage controls designed to prevent ground water contamination;
  - 4. Underground Injection Wells.
    - a. Class I wells;

- b. Class III wells:
- c. Class IV wells;
- d. Class V well subclasses 5F01 (Agricultural Drainage Wells), 5D03 (Improved Sinkholes), 5F04, 5W09 (Untreated Sewage Waste Wells), 5W10 (Cesspools), 5W11 (Septic Systems Undifferentiated Disposal Method), 5W31 (Septic Systems Well Disposal Method), 5X13 (Mining, Sand, or Other Backwells), 5X14 (Solution Mining Wells), 5X15 (In Situ Fossil Fuel Recovery Wells), 5W20, 5X28 (Motor Vehicle Waste Disposal Wells), and 5N24 (Radioactive Waste Disposal Wells);

# 5. Mining.

- a. Metals and hard rock mining;
- b. Sand and gravel mining;
- 6. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
- 7. Storage, Processing, or Disposal of Radioactive Substances. Facilities that store, process, or dispose of radioactive substances; and
- 8. Other.
  - a. Activities that would significantly reduce the recharge to aquifers currently or potentially used as potable water sources;
  - b. Activities that would significantly reduce the recharge to aquifers that are sources of significant baseflow to regulated streams;
  - c. Activities that are not connected to an available sanitary sewer system are prohibited from critical aquifer recharge areas associated with sole source aquifers; this includes residential developments on septic systems, as well as other commercial or industrial uses that may drain to underground reservoirs.
- G. State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable State and federal regulations.

Statutes, Regulations, and Guidance Pertaining to Ground-Water-Impacting Activities

Activity	Statute – Regulation – Guidance
Above Ground Storage Tanks	WAC <u>173-303-640</u>
Automobile Washers	Chapter <u>173-216</u> WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Below Ground Storage Tanks	Chapter <u>173-360</u> WAC
Chemical Treatment Storage and Disposal Facilities	WAC <u>173-303-182</u>
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)	Chapter <u>173-303</u> WAC
Injection Wells	Federal 40 CFR Parts 144 and 146; Chapter 173-218WAC
Junk Yards and Salvage Yards	Chapter <u>173-304</u> WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	WAC <u>332-12-450</u> ; Chapter <u>173-218</u> WAC
On-Site Sewage Systems (Large-Scale)	Chapter <u>173-240</u> WAC
On-Site Sewage Systems (< 14,500 gal./day)	Chapter <u>246-272</u> WAC; Local Health Ordinances
Pesticide Storage and Use	Chapters <u>15.54</u> and <u>17.21</u> RCW
Sawmills	Chapters <u>173-303</u> and <u>173-304</u> WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter <u>173-304</u> WAC
Surface Mining	WAC <u>332-18-015</u>

Statutes, Regulations, and Guidance Pertaining to Ground-Water-Impacting Activities

Activity	Statute – Regulation – Guidance
Waste Water Application to Land Surface	Chapters <u>173-200</u> and <u>173-216</u> WAC, WDOE
	Land Application Guidelines, Best Management
	Practices for Irrigated Agriculture

#### 18.60.260 Wetlands.

A. Identification of wetlands and delineation of their boundaries shall be done in accordance with the approved wetland delineation manual and applicable regional supplement. All areas within the City shoreline jurisdiction meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this Appendix.

- B. Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-029, or as revised and approved by Ecology), which contains the definitions and methods for determining whether the criteria below are met.
  - 1. Category I wetlands are those wetlands that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or provide a high level of functions (scoring 23 points or more). Category I wetland are those that meet any of the following criteria:
    - a. wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;
    - b. bogs; or
    - c. mature and old-growth forested wetlands larger than 1 acre.
  - 2. Category II wetlands are those wetlands with a moderately high level of functions (scoring between 20 and 22 points).
  - 3. Category III wetlands are those wetlands with a moderate level of functions (scoring between 16 and 19 points) that can often be adequately replaced with a well-planned mitigation project. These wetlands generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

- 4. Category IV wetlands are those wetlands that have the lowest levels of functions (scoring less than 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.
- D. The following buffer widths have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-029, or as revised and approved by Ecology). The adjacent land use intensity is assumed to be high.
  - 1. For wetlands that score 6 points or more for habitat function, the buffers in Table 260.1 can be used if both of the following criteria are met:
    - a. A relatively undisturbed, vegetated corridor at least 100 feet wide is protected between the wetland and any other Priority Habitats as defined by the Washington State Department of Fish and Wildlife. The latest definitions of priority habitats and their locations are available on the WDFW web site at: http://wdfw.wa.gov/hab/phshabs.htm ) The corridor must be protected for the entire distance between the wetland and the Priority Habitat by some type of legal protection such as a conservation easement. Presence or absence of a nearby habitat must be confirmed by a qualified biologist. If no option for providing a corridor is available, Table 260.1 may be used with the required measures in Table 260.2 alone.
    - b. All of the measures in Table 260.2 are implemented, where applicable, to minimize the impacts of the adjacent land uses.
  - 2. For wetlands that score 3-5 habitat points, only the measures in Table 260.2 are required for the use of Table 260.a.
  - 3. If an applicant choose not to apply the mitigation measures in Table 260.2, or is unable to provide a protected corridor where available, then Table 260.3 must be used.
  - 4. The buffer widths in Tables 260.1 and 260.3 assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform the needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided.

Table 260.1: Wetland Buffer Requirements if Table 260.2 is Implemented and Corridor Provided

Wetland Category	Buffer Width (in feet) based on Habitat Score		
Wetland Category	3-5	6-7	8-9
Category I:			
Based on total score	75	110	225
Category I:			
Bogs and Wetlands of High	190	190	225
Conservation Value			
Category II (all)	75	110	225
Category III (all)	60	110	225
Category IV (all)		40	

**Table 260.2: Required Measures to Minimize Impacts to Wetlands** (All measures required if applicable to a specific proposal)

Disturbance	Required Measures to Minimize Impacts  • Direct lights away from wetland		
Lights			
Noise	Locate activity that generates noise away from wetland     If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source     For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer		
Toxic runoff	Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered		
	Establish covenants limiting use of pesticides within 150 ft of wetland		
	Apply integrated pest management		
Stormwater runoff	Retrofit stormwater detention and treatment for roads and existing adjacent development     Prevent channelized flow from lawns that directly enters the buffer		
	Use Low Intensity Development techniques (for more information refer to the drainage ordinance and manual)		
Change in water regime	Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns		
Pets and human disturbance	Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion		
	<ul> <li>Place wetland and its buffer in a separate tract or protect with a conservation easement</li> </ul>		
Dust	Use best management practices to control dust		

Table 260.3: Wetland Buffer Requirements if Table 260.2 is NOT Implemented or Corridor NOT Provided

Wetland Category	Buffer Width (in feet) based on Habitat Score		
Wetland Category	3-5	6-7	8-9
Category I:			
Based on total score	100	150	300
Category I:			
Bogs and Wetlands of High	250	250	300
Conservation Value			
Category II (all)	100	150	300
Category III (all)	80	150	300
Category IV (all)		50	

E. Buffer width averaging may be allowed by the City if it will provide additional protection to wetlands or enhance their functions, as long as the total area contained in the buffer on the development proposal site does not decrease and the minimum buffer width remains at least 75 percent of the full width;

F. Increased buffer widths and enhancements to buffer vegetation shall be required by the City when necessary to protect wetlands. Provisions for additional buffer widths may be contained in administrative rules promulgated pursuant to this chapter including, but not limited to, provisions pertaining to critical drainage areas, location of hazardous substances, critical fish and wildlife habitat, landslide or erosion hazard areas contiguous to wetlands, ground water recharge and discharge and the location of trail or utility corridors;

G. The use of hazardous substances, pesticides and fertilizers in the wetland and its buffer is prohibited;

## 18.60.265 Wetlands – Regulated activities.

Land use and development activities in shoreline jurisdictional wetlands shall ensure no net loss of wetland area and functions, including lost time when the wetland does not perform the functions. Regulated activities include, but are not limited to, the following activities consistent with WAC 173-26-221(2)(c)(i)(A):

- A. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;
- B. The dumping, discharging, or filling with any material, including discharges of stormwater and domestic, commercial, or industrial wastewater;
- C. The draining, flooding, or disturbing of the water level, duration of inundation, or water table;
- D. The driving of pilings;
- E. The placing of obstructions;
- F. The construction, reconstruction, demolition, or expansion of any structure;
- G. Significant vegetation removal, provided that these activities are not part of a forest practice governed under chapter 76.09 RCW and its rules;
- H. Other uses or development that results in an ecological impact to the physical, chemical, or biological characteristics of wetlands; or
- I. Activities reducing the functions of buffers described in WAC 173-26-221(2)(c)(i)(D).

# 18.60.280 Wetlands – Mitigation requirements.

- A. Mitigation Sequencing. Before impacting any wetland or its buffer, an applicant shall demonstrate that the following actions have been taken. Actions are listed in order of preference:
  - 1. Avoid the impact altogether by not taking a certain action or parts of an action.
  - 2. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
  - 3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
  - 4. Reduce or eliminate the impact over time by preservation and maintenance operations.
  - 5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.
  - 6. Monitor the required compensation and take remedial or corrective measures when necessary.

- B. Compensatory mitigation actions shall generally be conducted within the same sub-drainage basin and on the site of the alteration except when the applicant can demonstrate that off-site mitigation is ecologically preferable. The following criteria will be evaluated when determining whether the proposal is ecologically preferable. When considering off-site mitigation, preference should be given to using alternative mitigation, such as a mitigation bank, an in-lieu-fee program, or advance mitigation. A watershed plan is required if off-site mitigation is proposed.
  - 1. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and required widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
  - 2. On-site mitigation would require elimination of high-quality upland habitat.
  - 3. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the altered wetland.
  - 4. Off-site locations shall be in the same sub-drainage basin unless:
    - a. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; or
    - b. Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;
    - c. Fees are paid to an approved in-lieu-fee program to compensate for the impacts.
- C. It is preferred that compensatory mitigation projects be completed prior to activities that will impact wetlands. At the least, compensatory mitigation shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
- D. Wetland Mitigation Ratios

Wetland Category	Creation or Re- establishment	Rehabilitation	Enhancement
Category I: Bogs and Wetlands of High Conservation Value	Not considered possible	Case by case	Case by case
Category I: Based on total score	4:1	8:1	16:1
Category II (all)	3:1	6:1	12:1
Category III (all)	2:1	4:1	8:1
Category IV (all)	1:5:1	3:1	6:1

G. Surface water management or flood control alterations including, but not limited to, wetponds shall not constitute replacement or enhancement unless other functions are simultaneously improved.

# 18.60.300 Isolated wetlands - Limited exemption.

Isolated wetlands less than 5,000 square feet may be altered by filling or dredging if the City determines that the cumulative impacts do not unduly counteract the purposes of this chapter and are mitigated pursuant to an approved mitigation plan.

### 18.60.310 Streams.

A. Stream ratings shall be consistent with the Washington Department of Natural Resources water typing categories (WAC 222-16-030), which are based on existing habitat functions and classified as follows:

- Type S: Streams and waterbodies inventoried as Shorelines of the State, under RCW 90.58.
   These watercourses and waterbodies shall be regulated under the Maple Valley Shoreline Master Program.
- 2. Type F: Those streams that are known to be used by fish or meet the physical criteria to be potentially used by fish (as established in WAC 222-16-031(3)) and have perennial (year-round) or seasonal flows.
- 3. Type Np: Those stream segments within the ordinary high water mark that are perennial and are not Type S or Type F streams. However, for the purpose of classification, Type Np streams include intermittent dry portions of the channel below the uppermost point of perennial flow. If the

uppermost point of perennial flow cannot be identified with simple, nontechnical observations (see Washington Forest Practices Board Manual, Section 23), then said point shall be determined by a qualified professional selected or approved by the City.

- 4. Type Ns: Those stream segments within the ordinary high water mark that are not Type S, Type F, or Type Np streams. These include seasonal streams in which surface flow is not present for at least some portion of a year of normal rainfall that are not located downstream from any Type Np stream segment.
- B. The following minimum buffers shall be established from the ordinary high water mark or from the top of the bank if the ordinary high water mark cannot be identified:
  - 1. Type F streams shall have a 100-foot buffer;
  - 2. Type Np streams shall have a 50-foot buffer;
  - 3. Type Ns streams shall have a 50-foot buffer;
  - 4. Any stream restored, relocated, replaced or enhanced because of a stream alteration shall have the minimum buffer required for the stream class involved;
  - 5. Any stream with an ordinary high water mark within 25 feet of the toe of a slope 30 percent or steeper, but less than 40 percent, shall have:
    - a. The minimum buffer required for the stream class involved or a 25-foot buffer beyond the top of the slope, whichever is greater, if the horizontal length of the slope including small benches and terraces is within the buffer for that stream class; or
    - b. A 25-foot buffer beyond the minimum buffer required for the stream class involved if the horizontal length of the slope including small benches and terraces extends beyond the buffer for that stream class; and
  - 6. Any stream adjoined by a riparian wetland or other contiguous critical area shall have the buffer required for the stream class involved or the buffer which applies to the wetland or other critical area, whichever is greater;
- C. Buffer width averaging may be allowed by the City if it will provide additional natural resource protection, as long as the total area contained in the buffer on the development proposal site does not decrease and the minimum buffer width remains at least 75 percent of the full buffer width;

- D. Increased buffer widths shall be required by the City when necessary to protect streams. Provisions for additional buffer widths shall be contained in administrative rules promulgated pursuant to this chapter including, but not limited to, critical drainage areas, location of hazardous substances, critical fish and wildlife habitat, landslide or erosion hazard areas contiguous to streams, ground water recharge and discharge and the location of trail or utility corridors;
- E. The use of hazardous substances, pesticides and fertilizers in the stream corridor and its buffer is prohibited;
- F. Except as provided in subsection (G) of this section, public and private trails may be allowed in stream buffers only upon adoption of administrative rules consistent with the following:
  - 1. The trail surface shall not be made of impervious materials; and
  - 2. Buffers shall be expanded, where possible, equal to the width of the trail corridor including disturbed areas:
- G. Stream crossings may be allowed and may encroach on the otherwise required stream buffer if:
  - 1. All crossings use bridges or other construction techniques which do not disturb the stream bed or bank, except that bottomless culverts or other appropriate methods demonstrated to provide fisheries protection may be used if the applicant demonstrates that such methods and their implementation will pose no harm to the stream or inhibit migration of fish;
  - 2. All crossings are constructed during the summer low flow and are timed to avoid stream disturbance during periods when use is critical to salmonids;
  - 3. Crossings do not occur over salmonid spawning areas unless the City determines that no other possible crossing site exists;
  - 4. Bridge piers or abutments are not placed within the FEMA floodway or the ordinary high water mark;
  - 5. Crossings do not diminish the flood-carrying capacity of the stream;
  - 6. Underground utility crossings are laterally drilled and located at a depth of four feet below the maximum depth of scour for the base flood predicted by a civil engineer licensed by the State of Washington. Temporary bore pits to perform such crossings may be permitted within the stream

buffer established in subsection (A) of this section. Crossing of Class 3 streams when dry may be made with open cuts; and

- 7. Crossings are minimized and serve multiple purposes and properties whenever possible;
- H. A stream channel may be stabilized if:
  - 1. Movement of the stream channel threatens existing residential or commercial structures, public facilities or improvements, unique natural resources or the only existing access to property; and
  - 2. The stabilization is done in compliance with the requirements of any applicable rules or regulations related to flood hazard or floodplain areas;
- I. Stream enhancement not associated with any other development proposal may be allowed if accomplished according to a plan for its design, implementation, maintenance and monitoring prepared by a civil engineer and a qualified biologist and carried out under the direction of a qualified biologist;
- J. A minor stream restoration project for fish habitat enhancement may be allowed if:
  - 1. The restoration is sponsored by a public agency with a mandate to do such work;
  - 2. The restoration is unassociated with mitigation of a specific development proposal;
  - 3. The restoration is limited to placement of rock wiers, log controls, spawning gravel and other specific salmonid habitat improvements;
  - 4. The restoration only involves the use of hand labor and light equipment; or the use of helicopters and cranes which deliver supplies to the project site; provided, that they have no contact with critical areas or their buffers; and
  - 5. The restoration is performed under the direction of a qualified biologist;
- K. Roadside and agricultural drainage ditches which carry streams with salmonids may be maintained through the use of best management practices developed in consultation with relevant county, State and federal agencies; and
- L. Reconstruction, remodeling, or replacement of an existing structure upon another portion of an existing impervious surface which was established pursuant to City codes and regulations may be allowed, provided:

- 1. If within the buffer, the structure is located no closer to the stream than the existing structure;
- 2. The existing impervious surface within the buffer or stream is not expanded as a result of the reconstruction or replacement.

## 18.60.320 Restoration and mitigation.

A. Restoration shall be required when a stream or its buffer is altered in violation of law or without any specific permission or approval by the City. A mitigation plan for the restoration shall demonstrate that:

- 1. The stream has been degraded and will not be further degraded by the restoration activity;
- 2. The restoration will reliably and demonstrably improve the water quality and fish and wildlife habitat of the stream;
- 3. The restoration will have no lasting significant adverse impact on any stream functions; and
- 4. The restoration will assist in stabilizing the stream channel.
- B. The following minimum requirements shall be met for the restoration of a stream:
  - 1. All work shall be carried out under the direct supervision of a qualified biologist;
  - 2. Basin analysis shall be performed to determine hydrologic conditions;
  - 3. The natural channel dimensions shall be replicated including its depth, width, length and gradient at the original location, and the original horizontal alignment (meander lengths) shall be replaced;
  - 4. The bottom shall be restored with identical or similar materials;
  - 5. The bank and buffer configuration shall be restored to its original condition;
  - 6. The channel, bank and buffer areas shall be replanted with vegetation native to the City which replicates the original vegetation in species, sizes and densities; and
  - 7. The original biologic functions of the stream shall be recreated.
- C. The requirements in subsection (B) of this section may be modified if the applicant demonstrates to the satisfaction of the City that a greater biologic function can otherwise be obtained.
- D. Replacement or enhancement shall be required when a stream or buffer is altered pursuant to an approved development proposal. There shall be no net loss of stream functions on a development

proposal site and no impact on stream functions above or below the site due to approved alterations. The requirements that apply to the restoration of streams in subsection (B) of this section shall also apply to the relocation of streams, unless the applicant demonstrates to the satisfaction of the City that a greater biologic function can be obtained by modifying these requirements.

E. Replacement or enhancement for approved stream alterations shall be accomplished in streams and on the site unless the applicant demonstrates to the satisfaction of the City that:

- 1. Enhancement or replacement on the site is not possible;
- 2. The off-site location is in the same drainage sub-basin as the original stream; and
- 3. Greater biologic and hydrologic functions will be achieved.

F. Surface water management or flood control alterations shall not be considered enhancement unless other functions are simultaneously improved.

#### 18.60.325 Wildlife habitat conservation areas.

A development proposal on a site containing a wildlife habitat conservation area or habitat buffer shall meet the following requirements:

A. When appropriate due to the type of habitat or species present or the project area conditions, the Director may require an assessment of habitats including the following site- and proposal-related information at a minimum:

- 1. Identification of any nonaquatic priority species, or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
- 2. A discussion of any federal, State, or local special management recommendations, including Washington State Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;
- 3. A discussion of any ongoing management practices that will protect habitat after the project site has been developed, including any proposed monitoring, maintenance, and adaptive management programs;
- 4. When appropriate, due to the type of habitat or species present or the project area conditions, the Director may also require the habitat management plan to include an evaluation by the

Washington State Department of Fish and Wildlife or other qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate.

- B. Where needed to protect habitat conservation areas, the Director shall require the establishment of buffers in or adjacent to these areas. Buffers shall consist of an undisturbed area of native vegetation, or areas identified for restoration, established to protect the integrity and functions of the habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Activities may be further restricted and buffers may be increased during the specified season.
- C. Development in or adjacent to habitat conservation areas shall meet the following general requirements:
  - 1. A habitat conservation area and associated buffer may be altered only if the proposed alteration of the habitat and associated buffer does not degrade the functions of the habitat and associated buffer.
  - 2. Plant or wildlife species not indigenous to Western Washington shall be excluded from habitat conservation areas and associated buffers unless authorized by a State or federal permit or approval.
  - 3. Mitigation sites should be located to achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area study to minimize the isolating effects of development on habitat areas.
  - 4. The Director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions may include, but are not limited to, the following:
    - a. Establishment of buffer zones;
    - b. Preservation of critically important vegetation;
    - c. Limitation of public access to the habitat area, including fencing to deter unauthorized access:
    - d. Seasonal restriction of activities;

- e. Establishment of a duration and timetable for periodic review of mitigation activities; and
- f. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

# Appendix A SHORELINE CRITICAL AREAS REGULATIONS

# Sections:

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# 18.60.010 Purpose.

The purpose of this appendix is to designate, classify, and protect the critical areas within the shoreline jurisdiction of Maple Valley by establishing regulations and standards for development and use of

properties which contain or adjoin shoreline jurisdictional critical areas for protection of the public health, safety, and welfare. The purpose and intent of this appendix is also to ensure that there is no net loss of the acreage or functions and values of shoreline jurisdictional critical areas regulated by this appendix. The regulations in this appendix are fully enforceable and considered part of the SMP.

- A. Establishing development standards to protect defined shoreline jurisdictional critical areas;
- B. Protecting members of the public and public resources and facilities from injury, loss of life, property damage or financial loss due to flooding, erosion, landslides, seismic events, soil subsidence or steep slope failures;
- C. Protecting unique, fragile and valuable elements of the environment including, but not limited to, wildlife and its habitat:
- D. Requiring mitigation of unavoidable impacts on environmentally critical areas by regulating alterations in or near shoreline jurisdictional critical areas;
- E. Preventing cumulative adverse environmental impacts on water availability, water quality, ground water, wetlands and streams;
- F. Measuring the quantity and quality of wetland and stream resources and preventing overall net loss of wetland and stream functions;
- G. Protecting the public trust as to navigable waters and aquatic resources;
- H. Alerting members of the public including, but not limited to, appraisers, owners, potential buyers or lessees to the development limitations of shoreline jurisdictional critical areas; and
- I. Providing City officials with sufficient information to protect shoreline jurisdictional critical areas.

### 18.60.020 Applicability.

A. The provisions of this chapter shall apply to all lands, land uses, and development activity in areas of shoreline jurisdiction in the City of Maple Valley. No action shall be taken by any person, which results in any alteration of any shoreline jurisdictional critical areas except as consistent with the purposes, objectives, and goals of this SMP.

#### 18.60.030 Definitions.

A. "Critical areas" include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas. "Fish and wildlife habitat conservation

areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company.

- B. "Critical aquifer recharge areas (CARA)" means those areas with a critical recharging effect on aquifers used for potable water as defined by WAC <u>365-190-030(3)</u>. CARA include:
  - 1. Those areas that have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water.
  - 2. Wellhead protection areas defined by the boundaries of the 10-year time of ground water travel, or boundaries established using alternate criteria approved by the Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.
  - 3. Those critical aquifer recharge areas delineated by a hydrogeologic study prepared in accordance with the State Department of Ecology guidelines.
  - 4. Susceptible ground water management areas as designated pursuant to Chapter 173-100 WAC.
  - 5. Special protection areas as defined by WAC 173-200-090.
  - 6. Those aquifer recharge areas meeting the criteria for susceptibility or vulnerability established by the State Department of Ecology.
  - 7. Sole source aquifers as designated by the U.S. Environmental Protection Agency under the Sole Source Aquifer Protection Plan authorized by Section 1424(e) of the Safe Drinking Water Act of 1974.
- C. "Director" means the Director of the Community Development Department or designee.
- D. "Erosion" means the process by which soil particles are mobilized and transported by natural agents such as wind, rainsplash, frost action or surface water flow.
- E. "Erosion hazard areas" means those areas underlain by soils which are subject to severe erosion when disturbed. Such soils include, but are not limited to, those classified as having a severe to very severe erosion hazard according to the USDA Natural Resources Conservation Service. These soils include, but are not limited to, any occurrence of River Wash ("Rh") or Coastal Beaches ("Cb") and the

following when they occur on slopes 15 percent or steeper: Alderwood Gravelly Sandy Loam (AgD), Alderwood and Kitsap (AkF), Beausite Gravelly Sandy Loam (BeD and BeF), Ovall Gravelly Loam (OvD and OvF), Ragnar Fine Sandy Loam (RaD), and Ragnar-Indianola association (RdE).

- F. "Flood hazard areas" means those areas subject to a general and temporary condition of partial or complete inundation of normally dry land areas from:
  - 1. The overflow of inland waters; and/or
  - 2. The unusual and rapid accumulation of runoff of surface waters from any source.
- G. "Hazardous substance processing or handling" means the use, storage, manufacture, or other land use activity involving hazardous substances, but does not include individually packaged consumer products or quantities of hazardous substances less than five gallons in volume per container. Hazardous substances shall not be disposed on site unless in compliance with Dangerous Waste Regulations, Chapter 173-303 WAC, and any pertinent local ordinances, such as sewer discharge standards.
- H. "Hazardous waste" means and includes all dangerous waste and extremely hazardous waste as designated pursuant to Chapter 70.105 RCW and Chapter 173-303 WAC.
  - 1. "Dangerous waste" means any discarded, useless, unwanted or abandoned substances including, but not limited to, certain pesticides, or any residues or containers of such substances which are disposed of in such quantity or concentration as to pose a substantial present or potential hazard to human health, wildlife, or the environment because such wastes or combinations of such wastes:
    - a. Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or
    - b. Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.
  - 2. "Extremely hazardous waste" means any waste which:
    - a. Will persist in a hazardous form for several years or more at a disposal site and which in its persistent form presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic makeup of humans or wildlife; and

- b. Is disposed of at a disposal site in such quantities as would present an extreme hazard to humans or the environment.
- I. "Landslide" means episodic downslope movement of a mass including, but not limited to, vegetation, soil and rock.
- J. "Landslide hazard area" means those areas subject to landslides based on a combination of geologic, topographic, and hydrologic factors, and include, at a minimum, the following:
  - 1. Areas of historic failures, such as:
    - a. Those areas delineated by the United States Department of Agriculture Natural Resources
       Conservation Service as having a significant limitation for building site development;
    - b. Those coastal areas mapped as class u (unstable), uos (unstable old slides), and urs (unstable recent slides) in the department of ecology Washington coastal atlas; or
    - c. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the United States Geological Survey or Washington department of natural resources.
  - 2. Areas with all three of the following characteristics:
    - a. Slopes steeper than 15 percent;
    - b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrockl; and
    - c. Springs or ground water seepage;
  - 3. Any area which has shown movement during the Holocene epoch, from 10,000 years ago to the present, or which is underlain or covered by mass wastage debris of this epoch;
  - 4. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
  - 5. Slopes having gradients steeper than eighty percent subject to rockfall during seismic shaking;
  - 6. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action, including stream channel migration zones; or

- 7. Any area located in a canyon or on an alluvial fan, presently subject to or potentially subject to inundation by debris flows or catastrophic flooding; and
- 8. Any area with a slope of forty percent or steeper and with a vertical relief of ten or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least ten feet of vertical relief.
- K. "Qualified professional," for purposes of this chapter, means a person with experience and training in the applicable critical area. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or related field, and two years of related work experience.
  - 1. A qualified professional for watercourses, wetlands, and wildlife habitat conservation areas must have a degree in biology or related field and relevant professional experience.
  - 2. A qualified professional for preparing geotechnical reports and geotechnical design recommendations must be a professional geotechnical engineer, licensed in the State of Washington, as defined under WAC <u>16-210-010(5)</u>. Identification and evaluation of geologic hazards may be performed by geologists or other geology professionals with experience identifying geologic hazards.
- L. "Seismic hazard areas" means those areas subject to severe risk of earthquake damage as a result of soil liquefaction in areas underlain by cohesionless soils of low density and usually in association with a shallow ground water table or of other seismically induced settlement.
- M. "Steep slope hazard areas" means those areas on slopes 40 percent or steeper within a vertical elevation change of at least 10 feet. A slope is delineated by establishing its toe and top and is measured by averaging the inclination over at least 10 feet of vertical relief. For the purpose of this definition:
  - 1. The toe of a slope is a distinct topographic break in slope which separates slopes inclined at less than 40 percent from slopes 40 percent or steeper. Where no distinct break exists, the toe of a steep slope is the lowermost limit of the area where the ground surface drops 10 feet or more vertically within a horizontal distance of 25 feet; and
  - 2. The top of a slope is a distinct, topographic break in slope which separates slopes inclined at less than 40 percent from slopes 40 percent or steeper. Where no distinct break exists, the top of a steep slope is the uppermost limit of the area where the ground surface drops 10 feet or more vertically within a horizontal distance of 25 feet.

N. "Stream functions" means natural processes performed by streams including functions which are important in facilitating food chain production, providing habitat for nesting, rearing and resting sites for aquatic, terrestrial and avian species, maintaining the availability and quality of water, such as purifying water, acting as recharge and discharge areas for ground water aquifers, moderating surface and stormwater flows and maintaining the free flowing conveyance of water, sediments and other organic matter.

O. "Streams" means those areas where surface waters produce a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses, unless they are used by salmonids or are used to convey streams naturally occurring prior to construction in such watercourses.

For the purpose of this definition, a "defined channel or bed" is an area which demonstrates clear evidence of the passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds and defined-channel swales.

The channel or bed need not contain water year-round.

For the purpose of defining the following categories of streams, "normal rainfall" is rainfall that is at or near the mean of the accumulated annual rainfall record, based upon the water year as recorded at the Seattle-Tacoma International Airport:

- 1. "Streams with fish" are those used by salmonids;
- 2. "Streams without fish" are those streams not used by salmonids that flow year-round during years of normal rainfall; and
- 3. "Intermittent streams" are those streams that are intermittent or ephemeral during years of normal rainfall and that are not used by salmonids.
- P. "Wetland edge" means the line delineating the outer edge of a wetland, consistent with the approved federal wetland delineation manual and applicable regional supplements.
- Q. "Wetland functions" means natural processes performed by wetlands including functions which are important in facilitating food chain production, providing habitat for nesting, rearing and resting sites for aquatic, terrestrial and avian species, maintaining the availability and quality of water, acting as recharge and discharge areas for ground water aquifers and moderating surface and stormwater flows, as well as performing other functions including, but not limited to, those set forth in 33 CFR 320.4(b)(2), 1988.

- R. "Wetland, isolated" means a wetland which has a total size less than 5,000 square feet excluding buffers, which is hydrologically isolated from other wetlands or streams, does not have permanent open water, and is determined to be of low function.
- S. "Wetlands" means those areas which are inundated or saturated by ground or surface water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands generally include swamps, marshes, bogs and similar areas, or other artificial features intentionally created to mitigate conversions of wetlands pursuant to wetlands mitigation banking.

Wetlands do not include artificial features created from nonwetland areas including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street or highway.

- T. "Wildlife habitat conservation areas" means those areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density of species richness. "Wildlife habitat conservation areas" do not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company. All areas within the City of Maple Valley meeting one or more of the following criteria are designated wildlife habitat conservation areas:
  - 1. Areas with which nonaquatic State- or federally designated endangered, threatened, and sensitive species have a primary association.
    - a. Federally designated endangered and threatened species are those wildlife species identified by the U.S. Fish and Wildlife Service that are in danger of extinction or are threatened to become endangered.
    - b. State-designated endangered, threatened, and sensitive nonaquatic wildlife species are those wildlife species native to the State of Washington identified by the Washington State Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a

significant portion of their range within the State without cooperative management or removal of threats. State-designated endangered, threatened, and sensitive species are periodically recorded in WAC <u>232-12-014</u> (State endangered species), and WAC <u>232-12-011</u> (State threatened and sensitive species).

2. Habitats and species of local importance. Habitats and species of local importance are those identified by the City Council, including those that possess unusual or unique habitat warranting protection, or land areas found by the City Council to be essential for preserving connections between habitat blocks and open spaces.

## 18.60.100 Disclosure by applicant.

A. The applicant shall disclose to the City the presence of critical areas on the development proposal site and any mapped or identifiable critical areas within 100 feet of the applicant's property to the extent known by, or readily available to, the applicant.

B. If the development proposal site contains or is within a critical area, the applicant shall submit a statement which declares whether the applicant has knowledge of any illegal alteration to any or all critical areas on the development proposal site and whether the applicant previously has been found in violation of this chapter. If the applicant previously has been found in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the City.

### 18.60.110 Critical area review.

A. The City shall perform a critical area review for any development proposal permit application or other request for permission to proceed with an alteration on a site which includes a critical area or is within an identified critical area buffer or building setback area.

- B. As part of the critical area review, the City shall:
  - 1. Determine whether any critical area exists on the property and confirm its nature and type;
  - 2. Determine whether a critical area special study is required;
  - 3. Evaluate the critical area special study;
  - 4. Determine whether the development proposal is consistent with this chapter;
  - 5. Determine whether any proposed alteration to the critical area is necessary; and

6. Determine if the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety and welfare, consistent with the goals, purposes, objectives and requirements of this chapter.

#### 18.60.120 Critical area special study requirement.

A. When review is required, an applicant for a new development proposal which includes a critical area or is within an identified critical area buffer shall submit a critical area special study to adequately evaluate the proposal and all probable impacts.

- B. The City may waive the requirement for a special study if the applicant shows, to the City's satisfaction, that any of the following are met:
  - 1. There will be no alteration of the critical area or buffer:
  - 2. The development proposal will not have an impact on the critical area in a manner contrary to the goals, purposes, objectives and requirements of this chapter; and
  - 3. The minimum standards required by this chapter are met.
- C. If necessary to ensure compliance with this chapter, the City may require additional information from the applicant, separate from the special study.

### 18.60.130 Contents of critical area special study.

- A. The critical area special study shall be in the form of a written report that has been prepared by a qualified professional and shall contain the following, as applicable:
  - 1. Identification and characterization of all critical areas on or encompassing the development proposal site;
  - 2. Assessment of the impacts or risks of any alteration proposed for a critical area or buffer, assessment of the impacts of any alteration on the development proposal, other properties and the environment, and/or assessment of the impacts to the development proposal resulting from development in the critical area or buffer;
  - 3. Studies which propose adequate mitigation, maintenance, monitoring and contingency plans and bonding measures;
  - 4. A scale map of the development proposal site;

- 5. Detailed studies on habitat value, hydrology, geological hazard, erosion and sedimentation and/or water quality. Such detailed studies shall include specific recommendations for mitigation which may be required as a condition of any development proposal approval. The recommendations may include, but are not limited to, construction techniques or design, drainage or density specifications; and
- 6. Other detailed studies, as required by the Director.
- B. A critical area special study may be combined with any studies required by other laws and regulations; and
- C. If the development proposal will affect only a part of the development proposal site, the City may limit the scope of the required special study to include only that part of the site which may be affected by the development.

## 18.60.140 Mitigation, maintenance, monitoring and contingency.

A. As determined by the City, mitigation, maintenance and monitoring measures shall be in place to protect critical areas and buffers from alterations occurring on the development proposal site.

B. Where monitoring reveals a significant deviation from predicted impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible for appropriate corrective action which, when approved, shall be subject to further monitoring.

## 18.60.150 Financial guarantees.

Financial guarantees may be required by the Director in the form of bonds, letters of credit, assignment of savings accounts, or similar performance or maintenance security devices.

## 18.60.160 Vegetation management plan.

A. For all development proposals where preservation or enhancement of existing vegetation is required by this chapter or by conditions of approval for a Process 2, 3, or 4 application, a vegetation management plan shall be submitted and approved prior to issuance of the permit or other request for permission to proceed with an alteration.

- B. The vegetation management plan shall identify the proposed clearing limits for the project and any areas where vegetation in a critical area or its buffer is proposed to be disturbed.
- C. Where clearing includes cutting any merchantable stand of timber, as defined in WAC <u>222-16-010(28)</u>, the vegetation management plan shall include a description of proposed logging practices which demonstrates how all critical areas will be protected in accordance with the provisions of this chapter.

- D. Clearing limits as shown on the plan shall be marked in the field in a prominent and durable manner. Proposed methods of field marking shall be reviewed and approved by City prior to any site alteration. Field marking shall remain in place until the Certificate of Occupancy or final project approval is granted.
- E. The vegetation management plan may be incorporated into a temporary erosion and sediment control plan or landscaping plan where either of these plans is required by other laws or regulations.
- F. Submittal requirements for vegetation management plans shall be set forth in administrative rules.

# 18.60.170 Critical area tract markers and signs.

- A. Permanent survey stakes delineating the boundary between adjoining property and critical area tracts shall be set, using iron or concrete markers as established by current survey standards.
- B. The boundary between a critical area tract and contiguous land shall be identified with permanent signs at intervals as required by the Director.

#### 18.60.180 Notice on title.

A. The owner of any property containing critical areas or buffers on which a development proposal is approved, except a public right-of-way or the site of a permanent public facility, shall file a notice approved by the City with the King County Records and Elections Division. The required contents and form of the notice shall be set forth in administrative rules. The notice shall inform the public of the presence of critical areas or buffers on the property, of the application of this chapter to the property and that limitations on actions in or affecting such critical areas or buffers may exist. The notice shall run with the land.

B. The applicant shall submit proof that the notice has been filed for public record before the City shall issue permits for any development proposal for the property or, in the case of subdivisions, short subdivisions and binding site plans, at or before recording the final plat or final binding site plan.

### 18.60.190 Critical area tracts and designations on site plans.

A. Critical area tracts shall be used to delineate and protect those critical areas and buffers listed below in development proposals for subdivisions, short subdivisions or binding site plans and shall be recorded on all documents of title of record for all affected lots:

- 1. All landslide hazard areas and buffers which are one acre or greater in size;
- 2. All steep slope hazard areas and buffers which are one acre or greater in size;
- 3. All wetlands and buffers; and

#### 4. All streams and buffers.

B. Any required critical area tract shall be held in an undivided interest by each owner of a building lot within the development with this ownership interest passing with the ownership of the lot or shall be held by an incorporated homeowner's association or other legal entity which assures the ownership, maintenance and protection of the tract.

C. Site plans submitted as part of development proposals for Building Permits, master plan developments and Clearing and Grading Permits shall include and delineate all landslide and steep slope hazard areas, streams and wetlands, buffers and building setbacks.

#### 18.60.200 Alteration.

Any human activity which results or is likely to result in an impact upon the existing condition of a critical area is an alteration which is subject to specific limitations as specified for each critical area. Alterations include, but are not limited to, grading, filling, dredging, draining, channelizing, applying herbicides or pesticides or any hazardous substance, discharging pollutants except stormwater, grazing domestic animals, paving, constructing, applying gravel, modifying for surface water management purposes, cutting, pruning, topping, trimming, relocating or removing vegetation or any other human activity which results or is likely to result in an impact to existent vegetation, hydrology, wildlife or wildlife habitat.

Alterations do not include walking, fishing or any other passive recreation or other similar activities.

# 18.60.210 Building setbacks.

Unless otherwise provided, buildings and other structures shall be set back a distance of 15 feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. The following may be allowed in the building setback area:

- A. Landscaping;
- B. Uncovered decks;
- C. Building overhangs if such overhangs do not extend more than 18 inches into the setback area; and
- D. Impervious ground surfaces, such as driveways and patios; provided, that such improvements may be subject to special drainage provisions.

#### 18.60.220 Erosion hazard areas.

A. Clearing on an erosion hazard area is allowed only from April 1st to September 1st, except that:

- 1. Up to 15,000 square feet may be cleared on any lot, subject to any other requirement for vegetation retention and subject to any Clearing and Grading Permit required by the MVMC; and
- 2. Timber harvest may be allowed pursuant to an approved Forest Practice Permit issued by the Washington State Department of Natural Resources.
- B. All development proposals on sites containing erosion hazard areas shall include a temporary erosion control plan consistent with this section and other laws and regulations prior to receiving approval. Specific requirements for such plans shall be set forth by the Director.
- C. All subdivisions, short subdivisions or binding site plans on sites with erosion hazard areas shall comply with the following additional requirements:
  - 1. Except as provided in this section, existing vegetation shall be retained on all lots until Building Permits are approved for development on individual lots;
  - 2. If any vegetation on the lots is damaged or removed during construction of the subdivision infrastructure, the applicant shall be required to submit a restoration plan to the City for review and approval. Following approval, the applicant shall be required to implement the plan;
  - 3. Clearing of vegetation on lots may be allowed without a separate Clearing and Grading Permit if the City determines that:
    - a. Such clearing is a necessary part of a large-scale grading plan;
    - b. It is not feasible to perform such grading on an individual lot basis; and
    - c. Drainage from the graded area will meet water quality standards to be established by administrative rules.
- D. Where the City determines that erosion from a development site poses a significant risk of damage to downstream receiving waters, based either on the size of the project, the proximity to the receiving water or the sensitivity of the receiving water, the applicant shall be required to provide regular monitoring of surface water discharge from the site. If the project does not meet water quality standards established by law or administrative rules, the City may suspend further development work on the site until such standards are met.
- E. The use of hazardous substances, pesticides and fertilizers in erosion hazard areas shall be prohibited unless specifically approved on a case-by-case basis by the City.

- F. No new development or creation of new lots is allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development (WAC 173-26-221(2)(c)(ii)(B)).
- G. No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. (WAC 173-26-221(2)(c)(ii)(C)).
- H. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

#### 18.60.230 Landslide hazard areas.

A development proposal on a site containing a landslide hazard area shall meet the following requirements:

- A. A minimum buffer of 50 feet shall be established from all edges of the landslide hazard area. The buffer shall be extended as required to mitigate a steep slope or erosion hazard or as otherwise necessary to protect the public health, safety and welfare;
- B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a landslide hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection;
- C. Vegetation on slopes within a landslide hazard area or buffer which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to the City pursuant to an enhancement plan approved by the City. The use of hazardous substances, pesticides and fertilizers in landslide hazard areas and their buffers may be prohibited by the City; and
- D. Alterations to landslide hazard areas and buffers may be allowed only as follows:
  - 1. A landslide hazard area located on a slope 40 percent or steeper may be altered only if the alteration meets the standards and limitations set forth for steep slope hazard areas in SMP Appendix A 18.60.250;

- 2. A landslide hazard area located on a slope less than 40 percent may be altered only if the alteration meets the following requirements:
  - a. The development proposal will not decrease slope stability on contiguous properties; and
  - b. Mitigation based on the best available engineering and geological practices is implemented which either eliminates or minimizes the risk of damage, death or injury resulting from landslides: and
- 3. Neither buffers nor a critical area tract shall be required if the alteration meets the standards of subsection (D) of this section.
- E. No new development or creation of new lots is allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development (WAC 173-26-221(2)(c)(ii)(B)).
- F. No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. (WAC 173-26-221(2)(c)(ii)(C)).
- G. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

### 18.60.240 Seismic hazard areas.

A development proposal on a site containing a seismic hazard area shall meet the following requirements:

A. Unless exempt, development proposals shall be subject to review standards based on two occupancy types: critical facilities and other structures. The review standards for critical facilities shall be based on longer earthquake reoccurrence intervals. The review standards for both occupancy types shall be set forth in administrative rules;

- B. Alterations to seismic hazard areas may be allowed only as follows:
  - 1. The evaluation of site-specific subsurface conditions shows that the proposed development site is not located in a seismic hazard area; or

- 2. Mitigation based on the best available engineering and geological practices is implemented which either eliminates or minimizes the risk of damage, death or injury resulting from seismically induced settlement or soil liquefaction; and
- 3. Mobile homes may be placed in seismic hazard areas without performing special studies to address the seismic hazard. Such mobile homes may be subject to special support and tie-down requirements. These requirements shall be set forth in administrative rules;
- C. Buildings with less than 2,500 square feet of floor area or roof area (whichever is greater) that contain no living quarters and that are not used as places of employment or public assembly are exempt from the provisions of this section.
- D. No new development or creation of new lots is allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development (WAC 173-26-221(2)(c)(ii)(B)).
- E. No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. (WAC 173-26-221(2)(c)(ii)(C)).
- F. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

## 18.60.250 Steep slope hazard areas.

A development proposal on a site containing a steep slope hazard area shall meet the following requirements:

A. A minimum buffer of 50 feet shall be established from the top, toe and along all sides of any slope 40 percent or steeper. The buffer shall be extended as required to mitigate a landslide or erosion hazard or as otherwise necessary to protect the public health, safety and welfare. The buffer may be reduced to a minimum of 10 feet if, based on a special study, the City determines that the reduction will adequately protect the proposed development and the critical area. For single-family residential Building Permits only, the City may waive the special study requirement if other development in the area has already provided sufficient information or if such information is otherwise readily available. The City may authorize buffer reductions to no less than 10 feet if the City determines that the reduction will adequately protect

the proposed development and the critical area pursuant to the requirements for a special study under SMP Appendix A 18.60.130.

- B. Unless otherwise provided herein or as part of an approved alteration, removal of any vegetation from a steep slope hazard area or buffer shall be prohibited, except for limited removal of vegetation necessary for surveying purposes and for the removal of hazard trees determined to be unsafe according to tree selection rules promulgated pursuant to this chapter. Notice to the City shall be provided prior to any vegetation removal permitted by this subsection.
- C. Vegetation on steep slopes within steep slope hazard areas or their buffers which has been damaged by human activity or infested by noxious weeds may be replaced with vegetation native to the City pursuant to a vegetation management plan approved by the City. The use of hazardous substances, pesticides and fertilizers in steep slope hazard areas and their buffers may be prohibited by the City.
- D. Alterations to steep slope hazard areas and buffers may be allowed only as follows:
  - 1. Approved surface water conveyances, as specified in the King County Surface Water Design Manual or other reference source or manual in use by the City, may be allowed on steep slopes if they are installed in a manner to minimize disturbance to the slope and vegetation;
  - 2. Public and private trails may be allowed on steep slopes as approved by the City. Under no circumstances shall trails be constructed of concrete, asphalt or other impervious surfaces which will contribute to surface water runoff, unless such construction is necessary for soil stabilization or soil erosion prevention or unless the trail system is specifically designed and intended to be accessible to handicapped persons. Additional requirements for trail construction may be set forth in administrative rules:
  - 3. Utility corridors may be allowed on steep slopes if a special study shows that such alteration will not subject the area to the risk of landslide or erosion;
  - 4. Limited trimming and pruning of vegetation may be allowed on steep slopes pursuant to an approved vegetation management plan for the creation and maintenance of views if the soils are not disturbed and the activity is subject to administrative rules;
  - 5. Approved mining and quarrying activities may be allowed;
  - 6. Stabilization of sites where erosion or landsliding threaten public or private structures, utilities, roads, driveways or trails, or where erosion and landsliding threatens any lake, stream, wetland or

shoreline. Stabilization work shall be performed in a manner which causes the least possible disturbance to the slope and its vegetative cover;

- 7. Reconstruction, remodeling, or replacement of existing structures;
- 8. Reconstruction, remodeling, or replacement of an existing structure upon another portion of an existing impervious surface which was established pursuant to City laws and regulations may be allowed, provided:
  - a. If within the buffer, the structure is located no closer to the steep slope than the existing structure:
  - b. The existing impervious surface within the buffer or steep slope is not expanded as a result of the reconstruction or replacement.
- E. The following are exempt from the provisions of this section:
  - 1. Slopes which are 40 percent or steeper with a vertical elevation change of up to 20 feet if no adverse impact will result from the exemption based on the City's review of and concurrence with a soils report prepared by a geologist or geotechnical engineer; and
  - 2. The approved regrading of any slope which was created through previous legal grading activities. Any slope which remains 40 percent or steeper following site development shall be subject to all requirements for steep slopes.
- F. No new development or creation of new lots is allowed that would cause foreseeable risk from geological conditions to people or improvements during the life of the development (WAC 173-26-221(2)(c)(ii)(B)).
- G. No new development is allowed that would require structural shoreline stabilization over the life of the development. Exceptions may be made for the limited instances where stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result. (WAC 173-26-221(2)(c)(ii)(C)).
- H. Where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible, and less expensive than the proposed stabilization measure, stabilization structures or measures to protect existing primary residential structures may be allowed in strict conformance with WAC 173-26-231 requirements and then only if no net loss of ecological functions will result.

### 18.60.255 Critical aquifer recharge areas.

Development on or adjacent to a critical aquifer recharge area shall meet the following requirements:

A. For projects where the construction of structures and improvements, including additions, results in more than 50 percent total site impervious surface area, the applicant shall provide surface water infiltration according to a surface water management plan that mitigates impacts to the aquifer recharge process, or shall submit a hydrogeologic assessment that indicates the proposal will not impact the recharge effect of the aquifer. Surface water management plans and hydrogeologic assessments shall be subject to review and approval by the Director.

- B. For development that includes hazardous substance processing or handling, or significant diversion, alteration or reduction to the flow of surface or ground waters, or otherwise significantly reduces the recharging of the aquifer, the development must be designed and constructed in accordance with a critical areas study that includes a hydrogeologic assessment of ground water vulnerability, including an assessment of predicted impacts to ground water recharge and ground water quality. Applications for development that will significantly affect ground water recharge or quality shall be denied if such impacts cannot be adequately mitigated.
- C. The proposed activity must comply with the water source protection requirements and recommendations of the Federal Environmental Protection Agency, State Department of Health, and Seattle-King County Public Health.
- D. Storage Tanks. The Fire Marshal specifically regulates and authorizes permits for underground storage tanks, and the Washington State Department of Ecology also regulates and authorizes permits for underground storage tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:
  - 1. Underground Tanks. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
    - a. Prevent releases due to corrosion or structural failure for the operational life of the tank;
    - b. Be protected against corrosion, constructed of noncorrosive material, steel-clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and
    - c. Use material in the construction or lining of the tank that is compatible with the substance to be stored.

- 2. Aboveground Tanks. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
  - a. Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;
  - b. Have a primary containment area enclosing or underlying the tank or part thereof; and
  - c. For all tanks, a secondary containment system either built into the tank structure or a dike system built outside the tank.

## E. Vehicle Repair and Servicing.

- 1. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
- 2. No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the State Department of Ecology prior to commencement of the proposed activity.
- F. Uses Prohibited from Critical Aquifer Recharge Areas. The following activities and uses are prohibited in critical aquifer recharge areas, provided expansion of existing uses may be allowed by the City if the applicant demonstrates through a special study that the proposed expansion will not negatively impact ground water quality or recharge:
  - 1. Waste transfer stations, landfills, and disposal of hazardous or dangerous waste, municipal solid waste, special waste, woodwaste, and inert and demolition waste;
  - 2. Junk yards;
  - 3. Inoperative Vehicles. Storage of wrecked or inoperative vehicles, except as an accessory to an allowed use when stored over impervious paving with drainage controls designed to prevent ground water contamination;
  - 4. Underground Injection Wells.
    - a. Class I wells;

- b. Class III wells:
- c. Class IV wells;
- d. Class V well subclasses 5F01 (Agricultural Drainage Wells), 5D03 (Improved Sinkholes), 5F04, 5W09 (Untreated Sewage Waste Wells), 5W10 (Cesspools), 5W11 (Septic Systems Undifferentiated Disposal Method), 5W31 (Septic Systems Well Disposal Method), 5X13 (Mining, Sand, or Other Backwells), 5X14 (Solution Mining Wells), 5X15 (In Situ Fossil Fuel Recovery Wells), 5W20, 5X28 (Motor Vehicle Waste Disposal Wells), and 5N24 (Radioactive Waste Disposal Wells);

## 5. Mining.

- a. Metals and hard rock mining;
- b. Sand and gravel mining;
- 6. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);
- 7. Storage, Processing, or Disposal of Radioactive Substances. Facilities that store, process, or dispose of radioactive substances; and
- 8. Other.
  - a. Activities that would significantly reduce the recharge to aquifers currently or potentially used as potable water sources;
  - b. Activities that would significantly reduce the recharge to aquifers that are sources of significant baseflow to regulated streams;
  - c. Activities that are not connected to an available sanitary sewer system are prohibited from critical aquifer recharge areas associated with sole source aquifers; this includes residential developments on septic systems, as well as other commercial or industrial uses that may drain to underground reservoirs.
- G. State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable State and federal regulations.

Statutes, Regulations, and Guidance Pertaining to Ground-Water-Impacting Activities

Activity	Statute – Regulation – Guidance
Above Ground Storage Tanks	WAC <u>173-303-640</u>
Automobile Washers	Chapter <u>173-216</u> WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Below Ground Storage Tanks	Chapter <u>173-360</u> WAC
Chemical Treatment Storage and Disposal Facilities	WAC <u>173-303-182</u>
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)	Chapter <u>173-303</u> WAC
Injection Wells	Federal 40 CFR Parts 144 and 146; Chapter 173-218WAC
Junk Yards and Salvage Yards	Chapter <u>173-304</u> WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	WAC <u>332-12-450</u> ; Chapter <u>173-218</u> WAC
On-Site Sewage Systems (Large-Scale)	Chapter <u>173-240</u> WAC
On-Site Sewage Systems (< 14,500 gal./day)	Chapter <u>246-272</u> WAC; Local Health Ordinances
Pesticide Storage and Use	Chapters <u>15.54</u> and <u>17.21</u> RCW
Sawmills	Chapters <u>173-303</u> and <u>173-304</u> WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter <u>173-304</u> WAC
Surface Mining	WAC <u>332-18-015</u>

Statutes, Regulations, and Guidance Pertaining to Ground-Water-Impacting Activities

Activity	Statute – Regulation – Guidance
Waste Water Application to Land Surface	Chapters <u>173-200</u> and <u>173-216</u> WAC, WDOE
	Land Application Guidelines, Best Management
	Practices for Irrigated Agriculture

#### 18.60.260 Wetlands.

A. Identification of wetlands and delineation of their boundaries shall be done in accordance with the approved wetland delineation manual and applicable regional supplement. All areas within the City shoreline jurisdiction meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this Appendix.

- B. Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-029, or as revised and approved by Ecology), which contains the definitions and methods for determining whether the criteria below are met.
  - 1. Category I wetlands are those wetlands that represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or provide a high level of functions (scoring 23 points or more). Category I wetland are those that meet any of the following criteria:
    - a. wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;
    - b. bogs; or
    - c. mature and old-growth forested wetlands larger than 1 acre.
  - 2. Category II wetlands are those wetlands with a moderately high level of functions (scoring between 20 and 22 points).
  - 3. Category III wetlands are those wetlands with a moderate level of functions (scoring between 16 and 19 points) that can often be adequately replaced with a well-planned mitigation project. These wetlands generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

- 4. Category IV wetlands are those wetlands that have the lowest levels of functions (scoring less than 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.
- D. The following buffer widths have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-029, or as revised and approved by Ecology). The adjacent land use intensity is assumed to be high.
  - 1. For wetlands that score 6 points or more for habitat function, the buffers in Table 260.1 can be used if both of the following criteria are met:
    - a. A relatively undisturbed, vegetated corridor at least 100 feet wide is protected between the wetland and any other Priority Habitats as defined by the Washington State Department of Fish and Wildlife. The latest definitions of priority habitats and their locations are available on the WDFW web site at: http://wdfw.wa.gov/hab/phshabs.htm ) The corridor must be protected for the entire distance between the wetland and the Priority Habitat by some type of legal protection such as a conservation easement. Presence or absence of a nearby habitat must be confirmed by a qualified biologist. If no option for providing a corridor is available, Table 260.1 may be used with the required measures in Table 260.2 alone.
    - b. All of the measures in Table 260.2 are implemented, where applicable, to minimize the impacts of the adjacent land uses.
  - 2. For wetlands that score 3-5 habitat points, only the measures in Table 260.2 are required for the use of Table 260.a.
  - 3. If an applicant choose not to apply the mitigation measures in Table 260.2, or is unable to provide a protected corridor where available, then Table 260.3 must be used.
  - 4. The buffer widths in Tables 260.1 and 260.3 assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform the needed functions, the buffer should either be planted to create the appropriate plant community or the buffer should be widened to ensure that adequate functions of the buffer are provided.

Table 260.1: Wetland Buffer Requirements if Table 260.2 is Implemented and Corridor Provided

Wetland Category	Buffer Width (in feet) based on Habitat Score		
	3-5	6-7	8-9
Category I:			
Based on total score	75	110	225
Category I:			
Bogs and Wetlands of High	190	190	225
Conservation Value			
Category II (all)	75	110	225
Category III (all)	60	110	225
Category IV (all)	40		

**Table 260.2: Required Measures to Minimize Impacts to Wetlands** (All measures required if applicable to a specific proposal)

Disturbance	Required Measures to Minimize Impacts
Lights	Direct lights away from wetland
Noise	Locate activity that generates noise away from wetland     If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source     For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic runoff	Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered
	Establish covenants limiting use of pesticides within 150 ft of wetland
	Apply integrated pest management
Stormwater runoff	Retrofit stormwater detention and treatment for roads and existing adjacent development     Prevent channelized flow from lawns that directly enters the buffer
	Use Low Intensity Development techniques (for more information refer to the drainage ordinance and manual)
Change in water regime	Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and human disturbance	Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion
	<ul> <li>Place wetland and its buffer in a separate tract or protect with a conservation easement</li> </ul>
Dust	Use best management practices to control dust

Table 260.3: Wetland Buffer Requirements if Table 260.2 is NOT Implemented or Corridor NOT Provided

Wetland Category	Buffer Width (in feet) based on Habitat Score		
	3-5	6-7	8-9
Category I:			
Based on total score	100	150	300
Category I:			
Bogs and Wetlands of High	250	250	300
Conservation Value			
Category II (all)	100	150	300
Category III (all)	80	150	300
Category IV (all)		50	

E. Buffer width averaging may be allowed by the City if it will provide additional protection to wetlands or enhance their functions, as long as the total area contained in the buffer on the development proposal site does not decrease and the minimum buffer width remains at least 75 percent of the full width;

F. Increased buffer widths and enhancements to buffer vegetation shall be required by the City when necessary to protect wetlands. Provisions for additional buffer widths may be contained in administrative rules promulgated pursuant to this chapter including, but not limited to, provisions pertaining to critical drainage areas, location of hazardous substances, critical fish and wildlife habitat, landslide or erosion hazard areas contiguous to wetlands, ground water recharge and discharge and the location of trail or utility corridors;

G. The use of hazardous substances, pesticides and fertilizers in the wetland and its buffer is prohibited;

### 18.60.265 Wetlands – Regulated activities.

Land use and development activities in shoreline jurisdictional wetlands shall ensure no net loss of wetland area and functions, including lost time when the wetland does not perform the functions. Regulated activities include, but are not limited to, the following activities consistent with WAC 173-26-221(2)(c)(i)(A):

- A. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;
- B. The dumping, discharging, or filling with any material, including discharges of stormwater and domestic, commercial, or industrial wastewater;
- C. The draining, flooding, or disturbing of the water level, duration of inundation, or water table;
- D. The driving of pilings;
- E. The placing of obstructions;
- F. The construction, reconstruction, demolition, or expansion of any structure;
- G. Significant vegetation removal, provided that these activities are not part of a forest practice governed under chapter 76.09 RCW and its rules;
- H. Other uses or development that results in an ecological impact to the physical, chemical, or biological characteristics of wetlands; or
- I. Activities reducing the functions of buffers described in WAC 173-26-221(2)(c)(i)(D).

## 18.60.280 Wetlands – Mitigation requirements.

- A. Mitigation Sequencing. Before impacting any wetland or its buffer, an applicant shall demonstrate that the following actions have been taken. Actions are listed in order of preference:
  - 1. Avoid the impact altogether by not taking a certain action or parts of an action.
  - 2. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.
  - 3. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
  - 4. Reduce or eliminate the impact over time by preservation and maintenance operations.
  - 5. Compensate for the impact by replacing, enhancing, or providing substitute resources or environments.
  - 6. Monitor the required compensation and take remedial or corrective measures when necessary.

- B. Compensatory mitigation actions shall generally be conducted within the same sub-drainage basin and on the site of the alteration except when the applicant can demonstrate that off-site mitigation is ecologically preferable. The following criteria will be evaluated when determining whether the proposal is ecologically preferable. When considering off-site mitigation, preference should be given to using alternative mitigation, such as a mitigation bank, an in-lieu-fee program, or advance mitigation. A watershed plan is required if off-site mitigation is proposed.
  - 1. There are no reasonable opportunities on site or within the sub-drainage basin (e.g., on-site options would require elimination of high-functioning upland habitat), or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capacity of the site to compensate for the impacts. Considerations should include: anticipated replacement ratios for wetland mitigation, buffer conditions and required widths, available water to maintain anticipated hydrogeomorphic classes of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);
  - 2. On-site mitigation would require elimination of high-quality upland habitat.
  - 3. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the altered wetland.
  - 4. Off-site locations shall be in the same sub-drainage basin unless:
    - a. Established watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City and strongly justify location of mitigation at another site; or
    - b. Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;
    - c. Fees are paid to an approved in-lieu-fee program to compensate for the impacts.
- C. It is preferred that compensatory mitigation projects be completed prior to activities that will impact wetlands. At the least, compensatory mitigation shall be completed immediately following disturbance and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.
- D. Wetland Mitigation Ratios

Wetland Category	Creation or Re- establishment	Rehabilitation	Enhancement
Category I: Bogs and Wetlands of High Conservation Value	Not considered possible	Case by case	Case by case
Category I: Based on total score	4:1	8:1	16:1
Category II (all)	3:1	6:1	12:1
Category III (all)	2:1	4:1	8:1
Category IV (all)	1:5:1	3:1	6:1

G. Surface water management or flood control alterations including, but not limited to, wetponds shall not constitute replacement or enhancement unless other functions are simultaneously improved.

## 18.60.300 Isolated wetlands - Limited exemption.

Isolated wetlands less than 5,000 square feet may be altered by filling or dredging if the City determines that the cumulative impacts do not unduly counteract the purposes of this chapter and are mitigated pursuant to an approved mitigation plan.

### 18.60.310 Streams.

A. Stream ratings shall be consistent with the Washington Department of Natural Resources water typing categories (WAC 222-16-030), which are based on existing habitat functions and classified as follows:

- Type S: Streams and waterbodies inventoried as Shorelines of the State, under RCW 90.58.
   These watercourses and waterbodies shall be regulated under the Maple Valley Shoreline Master Program.
- 2. Type F: Those streams that are known to be used by fish or meet the physical criteria to be potentially used by fish (as established in WAC 222-16-031(3)) and have perennial (year-round) or seasonal flows.
- 3. Type Np: Those stream segments within the ordinary high water mark that are perennial and are not Type S or Type F streams. However, for the purpose of classification, Type Np streams include intermittent dry portions of the channel below the uppermost point of perennial flow. If the

uppermost point of perennial flow cannot be identified with simple, nontechnical observations (see Washington Forest Practices Board Manual, Section 23), then said point shall be determined by a qualified professional selected or approved by the City.

- 4. Type Ns: Those stream segments within the ordinary high water mark that are not Type S, Type F, or Type Np streams. These include seasonal streams in which surface flow is not present for at least some portion of a year of normal rainfall that are not located downstream from any Type Np stream segment.
- B. The following minimum buffers shall be established from the ordinary high water mark or from the top of the bank if the ordinary high water mark cannot be identified:
  - 1. Type F streams shall have a 100-foot buffer;
  - 2. Type Np streams shall have a 50-foot buffer;
  - 3. Type Ns streams shall have a 50-foot buffer;
  - 4. Any stream restored, relocated, replaced or enhanced because of a stream alteration shall have the minimum buffer required for the stream class involved;
  - 5. Any stream with an ordinary high water mark within 25 feet of the toe of a slope 30 percent or steeper, but less than 40 percent, shall have:
    - a. The minimum buffer required for the stream class involved or a 25-foot buffer beyond the top of the slope, whichever is greater, if the horizontal length of the slope including small benches and terraces is within the buffer for that stream class; or
    - b. A 25-foot buffer beyond the minimum buffer required for the stream class involved if the horizontal length of the slope including small benches and terraces extends beyond the buffer for that stream class; and
  - 6. Any stream adjoined by a riparian wetland or other contiguous critical area shall have the buffer required for the stream class involved or the buffer which applies to the wetland or other critical area, whichever is greater;
- C. Buffer width averaging may be allowed by the City if it will provide additional natural resource protection, as long as the total area contained in the buffer on the development proposal site does not decrease and the minimum buffer width remains at least 75 percent of the full buffer width;

- D. Increased buffer widths shall be required by the City when necessary to protect streams. Provisions for additional buffer widths shall be contained in administrative rules promulgated pursuant to this chapter including, but not limited to, critical drainage areas, location of hazardous substances, critical fish and wildlife habitat, landslide or erosion hazard areas contiguous to streams, ground water recharge and discharge and the location of trail or utility corridors;
- E. The use of hazardous substances, pesticides and fertilizers in the stream corridor and its buffer is prohibited;
- F. Except as provided in subsection (G) of this section, public and private trails may be allowed in stream buffers only upon adoption of administrative rules consistent with the following:
  - 1. The trail surface shall not be made of impervious materials; and
  - 2. Buffers shall be expanded, where possible, equal to the width of the trail corridor including disturbed areas:
- G. Stream crossings may be allowed and may encroach on the otherwise required stream buffer if:
  - 1. All crossings use bridges or other construction techniques which do not disturb the stream bed or bank, except that bottomless culverts or other appropriate methods demonstrated to provide fisheries protection may be used if the applicant demonstrates that such methods and their implementation will pose no harm to the stream or inhibit migration of fish;
  - 2. All crossings are constructed during the summer low flow and are timed to avoid stream disturbance during periods when use is critical to salmonids;
  - 3. Crossings do not occur over salmonid spawning areas unless the City determines that no other possible crossing site exists;
  - 4. Bridge piers or abutments are not placed within the FEMA floodway or the ordinary high water mark;
  - 5. Crossings do not diminish the flood-carrying capacity of the stream;
  - 6. Underground utility crossings are laterally drilled and located at a depth of four feet below the maximum depth of scour for the base flood predicted by a civil engineer licensed by the State of Washington. Temporary bore pits to perform such crossings may be permitted within the stream

buffer established in subsection (A) of this section. Crossing of Class 3 streams when dry may be made with open cuts; and

- 7. Crossings are minimized and serve multiple purposes and properties whenever possible;
- H. A stream channel may be stabilized if:
  - 1. Movement of the stream channel threatens existing residential or commercial structures, public facilities or improvements, unique natural resources or the only existing access to property; and
  - 2. The stabilization is done in compliance with the requirements of any applicable rules or regulations related to flood hazard or floodplain areas;
- I. Stream enhancement not associated with any other development proposal may be allowed if accomplished according to a plan for its design, implementation, maintenance and monitoring prepared by a civil engineer and a qualified biologist and carried out under the direction of a qualified biologist;
- J. A minor stream restoration project for fish habitat enhancement may be allowed if:
  - 1. The restoration is sponsored by a public agency with a mandate to do such work;
  - 2. The restoration is unassociated with mitigation of a specific development proposal;
  - 3. The restoration is limited to placement of rock wiers, log controls, spawning gravel and other specific salmonid habitat improvements;
  - 4. The restoration only involves the use of hand labor and light equipment; or the use of helicopters and cranes which deliver supplies to the project site; provided, that they have no contact with critical areas or their buffers; and
  - 5. The restoration is performed under the direction of a qualified biologist;
- K. Roadside and agricultural drainage ditches which carry streams with salmonids may be maintained through the use of best management practices developed in consultation with relevant county, State and federal agencies; and
- L. Reconstruction, remodeling, or replacement of an existing structure upon another portion of an existing impervious surface which was established pursuant to City codes and regulations may be allowed, provided:

- 1. If within the buffer, the structure is located no closer to the stream than the existing structure;
- 2. The existing impervious surface within the buffer or stream is not expanded as a result of the reconstruction or replacement.

### 18.60.320 Restoration and mitigation.

A. Restoration shall be required when a stream or its buffer is altered in violation of law or without any specific permission or approval by the City. A mitigation plan for the restoration shall demonstrate that:

- 1. The stream has been degraded and will not be further degraded by the restoration activity;
- 2. The restoration will reliably and demonstrably improve the water quality and fish and wildlife habitat of the stream;
- 3. The restoration will have no lasting significant adverse impact on any stream functions; and
- 4. The restoration will assist in stabilizing the stream channel.
- B. The following minimum requirements shall be met for the restoration of a stream:
  - 1. All work shall be carried out under the direct supervision of a qualified biologist;
  - 2. Basin analysis shall be performed to determine hydrologic conditions;
  - 3. The natural channel dimensions shall be replicated including its depth, width, length and gradient at the original location, and the original horizontal alignment (meander lengths) shall be replaced;
  - 4. The bottom shall be restored with identical or similar materials;
  - 5. The bank and buffer configuration shall be restored to its original condition;
  - 6. The channel, bank and buffer areas shall be replanted with vegetation native to the City which replicates the original vegetation in species, sizes and densities; and
  - 7. The original biologic functions of the stream shall be recreated.
- C. The requirements in subsection (B) of this section may be modified if the applicant demonstrates to the satisfaction of the City that a greater biologic function can otherwise be obtained.
- D. Replacement or enhancement shall be required when a stream or buffer is altered pursuant to an approved development proposal. There shall be no net loss of stream functions on a development

proposal site and no impact on stream functions above or below the site due to approved alterations. The requirements that apply to the restoration of streams in subsection (B) of this section shall also apply to the relocation of streams, unless the applicant demonstrates to the satisfaction of the City that a greater biologic function can be obtained by modifying these requirements.

E. Replacement or enhancement for approved stream alterations shall be accomplished in streams and on the site unless the applicant demonstrates to the satisfaction of the City that:

- 1. Enhancement or replacement on the site is not possible;
- 2. The off-site location is in the same drainage sub-basin as the original stream; and
- 3. Greater biologic and hydrologic functions will be achieved.

F. Surface water management or flood control alterations shall not be considered enhancement unless other functions are simultaneously improved.

#### 18.60.325 Wildlife habitat conservation areas.

A development proposal on a site containing a wildlife habitat conservation area or habitat buffer shall meet the following requirements:

A. When appropriate due to the type of habitat or species present or the project area conditions, the Director may require an assessment of habitats including the following site- and proposal-related information at a minimum:

- 1. Identification of any nonaquatic priority species, or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
- 2. A discussion of any federal, State, or local special management recommendations, including Washington State Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;
- 3. A discussion of any ongoing management practices that will protect habitat after the project site has been developed, including any proposed monitoring, maintenance, and adaptive management programs;
- 4. When appropriate, due to the type of habitat or species present or the project area conditions, the Director may also require the habitat management plan to include an evaluation by the

Washington State Department of Fish and Wildlife or other qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate.

- B. Where needed to protect habitat conservation areas, the Director shall require the establishment of buffers in or adjacent to these areas. Buffers shall consist of an undisturbed area of native vegetation, or areas identified for restoration, established to protect the integrity and functions of the habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Activities may be further restricted and buffers may be increased during the specified season.
- C. Development in or adjacent to habitat conservation areas shall meet the following general requirements:
  - 1. A habitat conservation area and associated buffer may be altered only if the proposed alteration of the habitat and associated buffer does not degrade the functions of the habitat and associated buffer.
  - 2. Plant or wildlife species not indigenous to Western Washington shall be excluded from habitat conservation areas and associated buffers unless authorized by a State or federal permit or approval.
  - 3. Mitigation sites should be located to achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area study to minimize the isolating effects of development on habitat areas.
  - 4. The Director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions may include, but are not limited to, the following:
    - a. Establishment of buffer zones;
    - b. Preservation of critically important vegetation;
    - c. Limitation of public access to the habitat area, including fencing to deter unauthorized access:
    - d. Seasonal restriction of activities;

- e. Establishment of a duration and timetable for periodic review of mitigation activities; and
- f. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.